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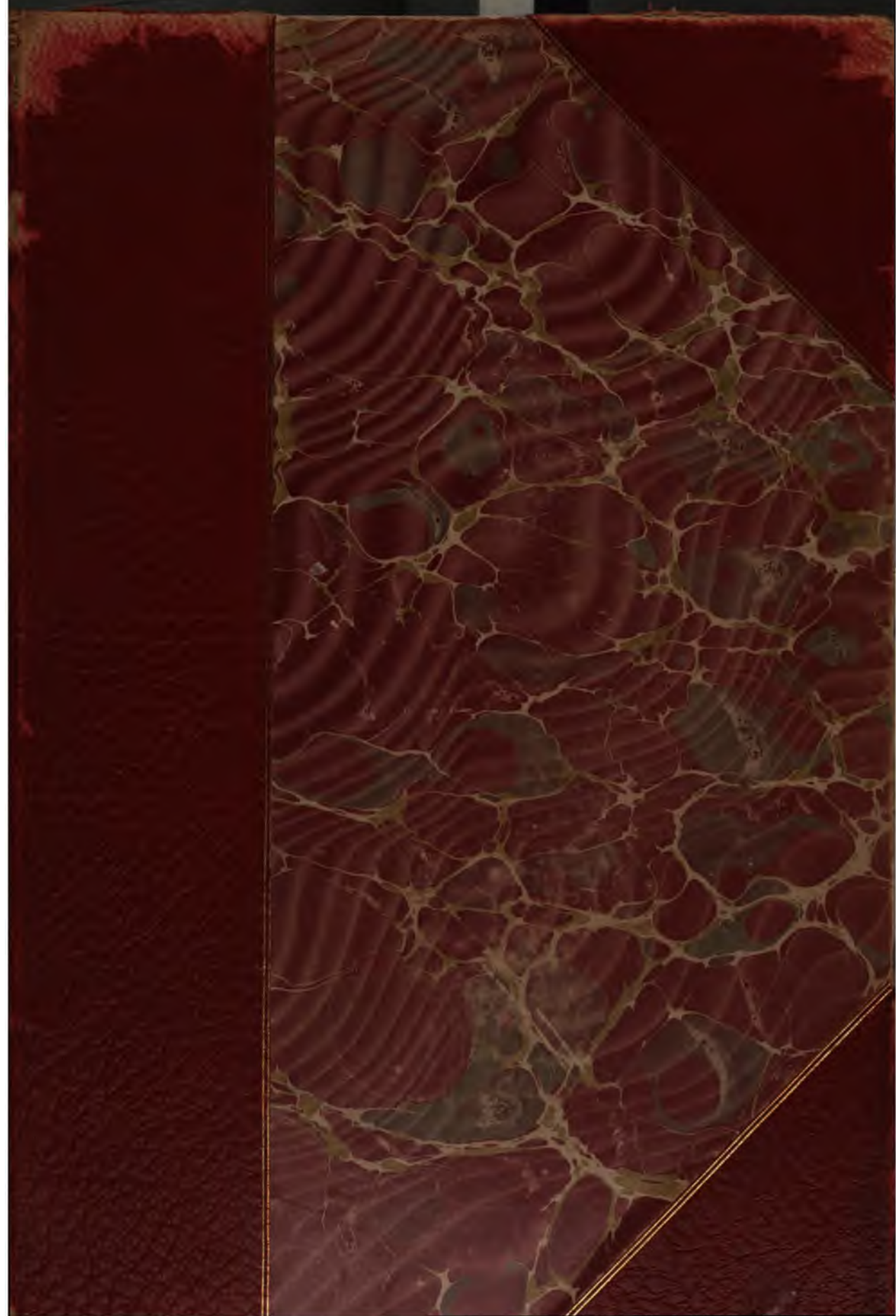
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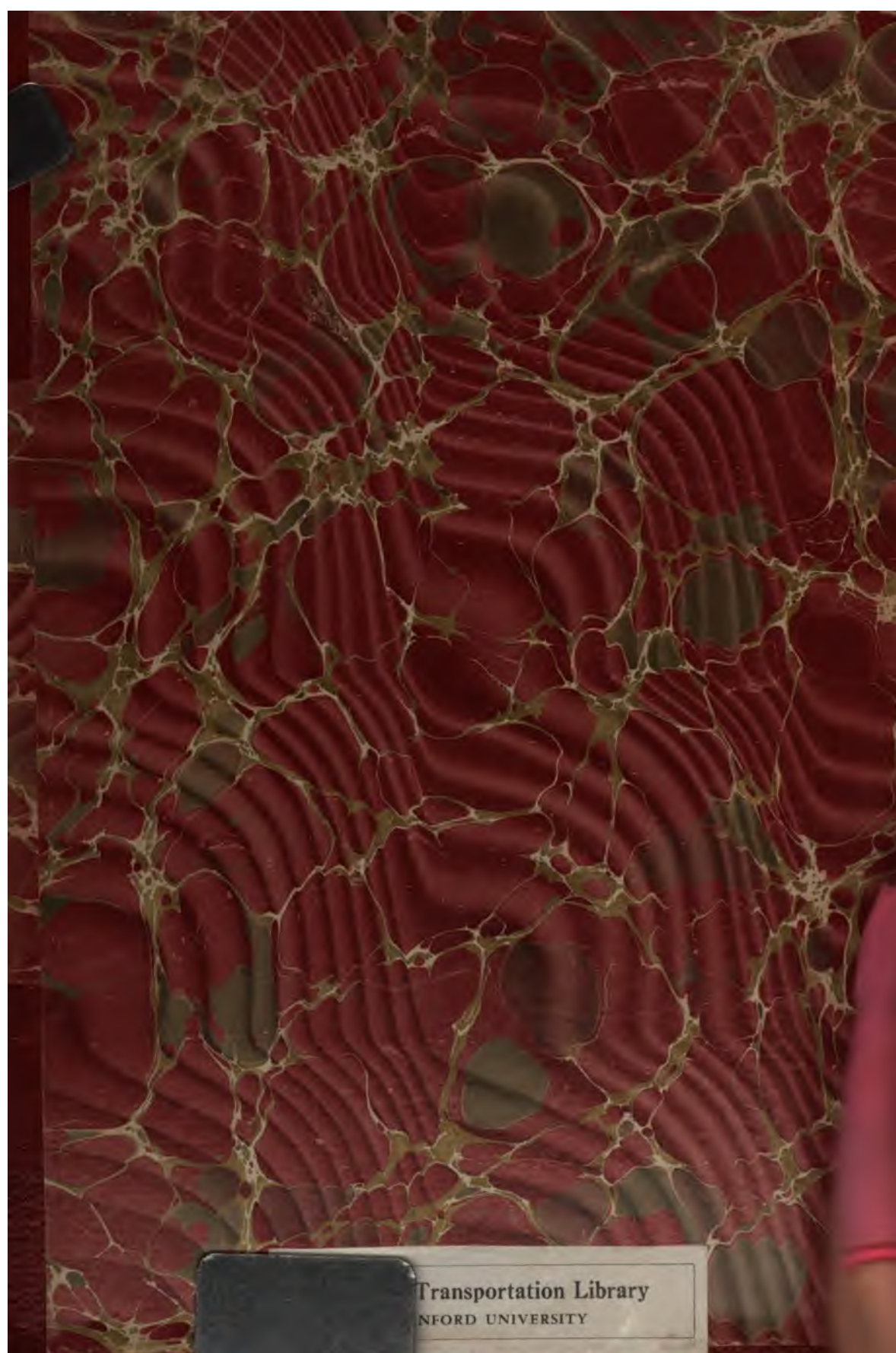
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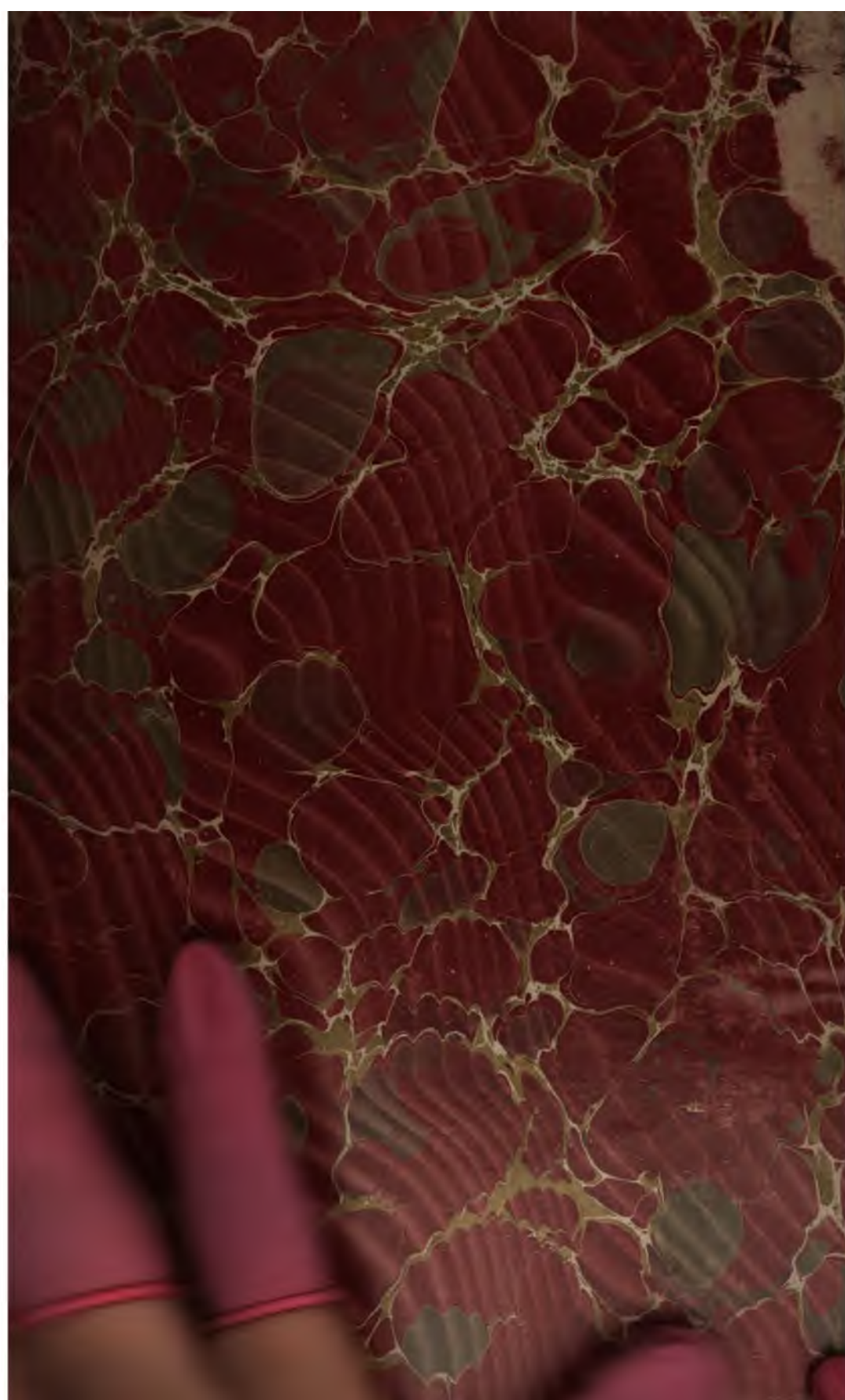
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HISTORY
of the
Pennsylvania Railroad Company
with
Plan of Organization, Portraits of Officials
and
Biographical Sketches

By
WILLIAM BENDER WILSON

ILLUSTRATED

In Two Volumes
VOL. II



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HISTORY

OF THE

PENNSYLVANIA RAILROAD.

CHAPTER VIII.

ORGANIZATION AND BIOGRAPHY.

THE organization of the Pennsylvania Railroad Company is based upon the widest distribution of responsibility consistent with the best possible service. The head of the organization is the President, who is charged with the double duty of seeing that the capital invested shall receive a fair return, and that the railroad, as a highway, shall be so operated that it will conduce to the advancement of the State and the happiness of the people. And it is to the honor of the Pennsylvania Railroad Company that each of its Presidents was true to those duties, and had the ability to perform them, with the result that its property to-day is the most valuable railroad property in the world—best constructed, best equipped, managed and operated—and the State which incorporated it the most prosperous.

When the second half of its first century of life opened upon the Pennsylvania Railroad Company, the vista changed to new fields of endeavor as the march of successful progress continued. The magnificent property, with its splendid force of well-drilled men and its unequalled credit, led as the standard. It, however, required to be fed with paying traffic, and, in consequence, the commercial needs of the Company became of the first importance. Traffic no longer sought any particular channel to pass through ;

it had to be created and sought for. People living in different longitudes, or in widely-separated latitudes, with dissimilar wants and different products, were to be educated up to proper interchanges and attracted toward the line as a medium for effecting them. As in the past, the directing mind of the corporation was equal to the requirements.

When the mantle of the President of the Pennsylvania Railroad Company fell upon the shoulders of Frank Thomson, it adjusted itself naturally and gracefully to the person of one who was worthy to wear it by birth, ability and service. His father was one of the leading lawyers, jurists and statesmen of his day, the legal preceptor of many able Pennsylvanians, and left upon the records of the courts and in the halls of the National and Pennsylvania Legislatures a recital of a brilliant career and a spotless reputation. It would be unjust to the son not to mention the father, and thus indicate the ancestral influences which operated in moulding his character. Frank Thomson is not a self-made man in the sense that he rose from obscurity to his present commanding position. On the contrary, he is a God-made man, born to lead, and given an environment to afford the opportunity for development. It is unfair to any man to limit the recommendation of his standing by comparing him to some one else. Every man has his own individuality, by which he should be portrayed. Mr. Thomson's stands out in bold lines, so that he who runs may read. It is as strong and as well defined as were those of his eminent predecessors; and, influenced by it, his administration of the great corporation's affairs will be as markedly successful. His abilities, characteristics, habits of thought, manners, ambitions, breadth of knowledge and research, tireless activity and ceaseless industry are above the ordinary, and have always been healthy. Guided by a high order of integrity, the warmest of warm hearts, and a prodigal charity, those qualities have caused him to add honor and lustre to every position he has been called upon to fill. He was born to be a man of destiny, and it makes no difference where such a man starts in the journey of life, nor along what line of endeavor he travels; success is bound to crown his efforts. There is as much nobility in an American boy starting life as a machinist-apprentice as there is in a

prince of the empire starting as a cadet at Woolwich, and greater results to humanity in the subsequent life and station of each. Frank Thomson chose the better part. Conscious of his abilities and opportunities, he did not, as so many young men similarly circumstanced do, abuse the former nor neglect the latter, but used them both for the advancement of his life-work. He was straightforward, honorable, upright and clean as a boy; and those qualities, strengthened and broadened in his manhood, have shone untarnished throughout his career.

Duty had only to be presented to him, without outlining the manner of performance, to insure conscientious and speedy attention at his hands. Always a master of details, it has never been necessary for him to stop and measure their value. They have rushed with mighty strides before his mind and led him to sound conclusions. A man of wonderful self-control, his poise has ever been the same, whether amidst the whirling of machinery, the din of battle, the rumbling of trains, the rush of business, in the delights of the chase, the halls of entertainment, or the quiet of the fireside. With that poise he steps to the front in his chosen profession as a leader; and, as the "New York Herald" truly says of him, "No emergency can arise, so far as the Pennsylvania Railroad is concerned, that will not be met with the intrepidity and wisdom shown in his long and honorable career."

He was born at Chambersburg, Franklin County, Pa., on the 5th of July, 1841.

Whatever education he acquired in the schools was received at the Chambersburg Academy, which had the reputation of being one of the foremost educational institutions in the State. At seventeen he decided upon the railroad as his life-work, and entered the shops of the Pennsylvania Railroad Company at Altoona, determined to master the details of that business. Thomas A. Scott, knowing his abilities and seeing his efforts to achieve success, directed his studies towards general management, conducting transportation, maintenance of way, as well as to motive power and equipment. That he was an apt student, his career has proven. There is no man who owes less to influential backing and more to merit and force of character than Frank Thomson.

Upon the breaking out of the rebellion Mr. Scott was called to Washington and placed in charge of the military railroads and telegraphs in the United States, and Mr. Thomson was one of the few men he selected to aid him. Mr. Thomson went to work to assist in the movement of troops into Washington, via Annapolis, afterwards via Baltimore, and in organizing Colonel Scott's department of the army. After midnight of May 24th, or, properly speaking, in the early morning of May 25, 1861, our troops occupied Alexandria, Va., and by noon of the latter date Mr. Thomson made his headquarters in that city in a house he named the "Scott House," and calling around him some true and tried men from off the Pennsylvania Railroad, proceeded to restore the Orange and Alexandria and the Loudon and Hampshire Railroads, repair the shops, machinery, and whatever rolling stock the enemy had left behind in its retreat. This was extraordinary work and responsibility for a young man not quite twenty years of age. He also superintended transporting locomotives and other railroad equipment by water from Washington to Alexandria, and upon one occasion, when a locomotive was lost overboard during a storm and laid in twenty-five feet of water, he superintended raising it, putting it in a "sling" of chains, and floating it to the wharf at Alexandria, where with a pair of shears it was put again on terra firma. He had more or less to do with the construction of the road on Virginia and Maryland avenues in Washington, across the Long Bridge and down to Alexandria, which brought Washington into rail connection with the front. As the National troops advanced, the necessity arose for the construction of new roads and telegraph lines, for the rebuilding of bridges, reconstruction of old roads partly destroyed by the enemy, and with that necessity arose Mr. Thomson's ability to meet any responsibility in connection therewith that was placed upon him. As his powers developed—and they developed rapidly—Mr. Scott utilized them to the benefit of the Government in its peril. This early development of those traits of masterful force and shrewd conception of a situation has served him well through life. He was always kind and considerate for the men who worked under him, and shared their burdens and discomforts. No man worked harder, in a physical as well as mental sense, than he when

occasion required it, and no man was more tender in handling, caring for or nursing the sick and wounded. He left the Department of the Potomac July 1, 1862, and reported for duty on the military routes south of Nashville. The line of railroad, over 300 miles in length, wretchedly constructed and sparingly equipped, badly broken and open to cavalry raids, which, in point of fact, were daily made upon it, had to be kept in repair, as it was the only line of communication that Buell's army had with Nashville, its base of supplies. The task was a herculean one, but it was accomplished by the aid of General O. M. Mitchell and his army. It was no sooner completed, however, than the movements of the enemy in both Tennessee and Kentucky caused Buell to abandon his intention of seizing Chattanooga and to make a forced march on Louisville, which was seriously threatened. On that long, tedious and perilous march—which became historical—Mr. Thomson accompanied the army, sharing in its perils and privations. Returning to Washington, he devoted his attention to the repairing of railroads hurt by Lee's march through Maryland, and in pushing forward troops, stores and munitions of war during the Antietam campaign. In the campaigns of Burnside and Hooker, which ended in the battles of Fredericksburg and Chancellorsville, he served as Assistant Superintendent in charge of the lines south of Aquia Creek, and pushed forward over them the supplies for the Army of the Potomac. He then returned to the Pennsylvania Railroad, only to serve a few weeks, when he was recalled to the seat of war to aid Colonel Scott in the greatest military transportation movement of the age. A grave emergency had arisen; a large army—the Army of the Cumberland—was cooped up in Chattanooga, with an inadequate line of supplies. Bragg, the Confederate commander, environing it and threatening to force its capitulation, rendered urgent the necessity for relief. The 11th and 12th Army Corps of the Army of the Potomac, near Washington, were assigned as the reinforcement for that relief. These corps contained 20,000 men, to transport which, with their horses, wagons, supplies, artillery, munitions and baggage, required over 650 cars. After making the preliminary arrangements and starting the movement, Colonel Scott went to Louisville and placed Mr.

Thomson in charge of the lines south of Nashville, the most difficult and dangerous part of the route and the hardest to keep open ; but so well was his portion of the task performed that the movement was successful, and the wonderful and unequalled achievement of picking up an army 20,000 strong, transporting it a third way over the continent, through a country where an active enemy was constantly assailing the lines of communication, and in fourteen days' time relieving a beleaguered force, burst upon an astonished world as a revelation of the fertile resources of the American citizen, and partially disclosed what the railroad system of this country was destined to become under such able men.

In June, 1864, when he lacked one month of being twenty-three years old, he resigned his army position and accepted the Superintendency of the Eastern Division of the Philadelphia and Erie Railroad, with office at Williamsport, Pa. He remained in that position until March, 1873, with the exception of a short period in 1866, when he managed the Oil Creek Railroad during the height of the oil excitement. It was whilst he was at Williamsport that the Pennsylvania Railroad Company selected him to take charge of the itinerary in the United States of the Russian Grand Duke Alexis. Mr. Thomson arranged the details of the tour, embracing the time-tables and all the comforts and safeguards. The "special" thus provided for ran over 6000 miles in the United States and Canada, proceeded as far South as New Orleans and as far West as Denver without a single mishap, and won for Mr. Thomson the highest praise from the Russian Admiral who had charge of the Grand Duke and his suite. That official, in a highly complimentary letter to the management of the Pennsylvania Railroad, spoke of Mr. Thomson as being "no less agreeable as a companion than invaluable as a manager." While Superintendent of the Eastern Division, Philadelphia and Erie, he originated improvements in railway construction, and organized the system of competitive track inspection which has since been adopted on all the lines of the Pennsylvania Railroad Company. In March, 1873, he was made Superintendent of Motive Power for the Pennsylvania Railroad. On July 1, 1874, he was appointed General Manager of the entire system east of Pittsburgh and Erie, succeeding that able and astute

railroad engineer and manager, A. J. Cassatt, who had held the position but a short period. Mr. Thomson took up and promoted the work of organization from the point where Mr. Cassatt had left it. Everything was put in order and new systems introduced, the chief of which was the system of block signalling, whilst preparations were made to accommodate the future growth of the business of the road upon the most solid basis of economy, utility and stability. On October 9, 1882, he was appointed Second Vice President; on June 27, 1888, First Vice President; and on February 3, 1897, was elected President.

If he has proven successful in the construction, operating and mechanical departments of railroad management, he has been none the less so in the commercial department. The delicate questions always arising with a local, interstate, continental, and foreign trade and travel in this country, and which require the most diplomatic and tactful handling, have found in him a master, whilst the managers of lines competing with him for that business are content to follow where he leads.

Mr. Thomson is a man of broad and comprehensive mind, with inventive trend, unremitting in effort, possessed of a genius for organization, with a keen foresight and a fund of knowledge, orderly and refined whilst swift in action, and has not only placed himself at the head of the practical operations of the Pennsylvania Railroad Company, but has left a personal mark on the executive department of the road that will guide future generations of employees in their actions.

He is a gentleman of strong affections in his family and social field, cultivating, as opportunity offers, a keen taste, with which he is endowed, for the literary, scientific and artistic. His love for and devotion to the old-time railroad men is well known. He never allows a case which concerns their welfare to pass his notice without giving it personal consideration.

THE BOARD.

The projectors and promoters of the Company acted wisely when they disposed of the capital stock by popular subscription, and thus practically placed the control of the Company in the

hands of the people and beyond the influences of speculation. The direction of its affairs was reposed in conservative business men, whose prominence did not grow out of manipulations of contracts and corporation securities, but was the result of careful training and energetic and honorable devotion to business pursuits.

It was largely because of the location of the Company at Philadelphia that success was assured from the beginning. It was a Philadelphia road, built by Philadelphia capital, in Philadelphia interests, and traversing the whole length of Pennsylvania to the City of Pittsburgh—the foremost iron manufacturing centre in this country—while the country through which it passes, rich in mineral and other products for the development of great industries, furnished a sustaining traffic, upon which its splendid development was founded. Its Board of Directors has been made up from the representative men of the State of Pennsylvania, and from the active walks of mercantile and professional life. It is distinctively *the* Pennsylvania system, sustained by the patriotism and civic pride of commonwealth and municipality, and not one of many systems of a sister State with no such sustaining powers.

Whilst the President is the executive head of the Company, clothed with full power of supervision over its affairs, yet all the important questions which present themselves for consideration come to the Board for its action. The organization provides for a proper division of responsibility for the care and conduct of the Company's business, and this has insured faithful service and successful results. It grants a wide freedom of action, out of which have grown close relations and free consultation between the higher officials and subordinates. The diffusion of responsibility has done more—it has relieved the Directors of much detailed work, and has enabled them to give closer attention to the general physical and financial conditions and problems of railroad management ever demanding their attention.

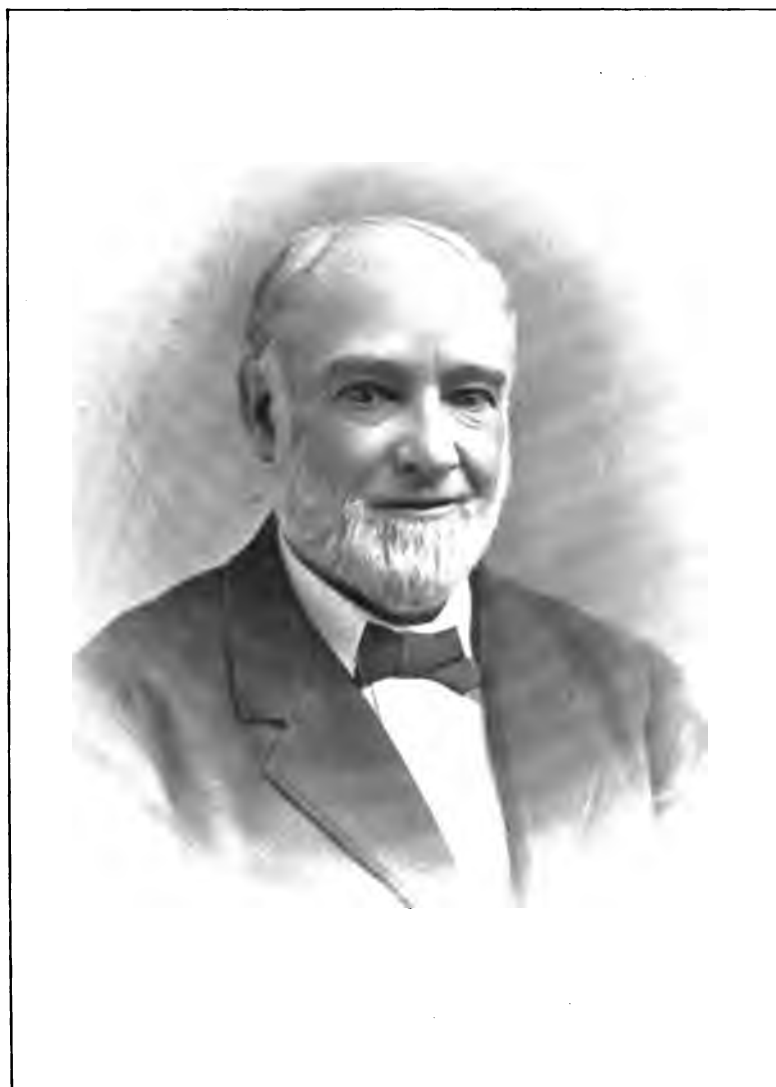
The enabling Act of April 13, 1846, provided for 13 Directors, citizens and residents of Pennsylvania, and who owned not less than twenty shares of the capital stock, to be elected annually on the first Monday in December. The first Board was elected on Tuesday, March 30, 1847, and the second on Monday, December

6, 1847. The Board was also authorized to fill vacancies in its membership. Under the provisions of the Act of April 23, 1850, the stockholders' annual meeting was changed from the first Monday in December to the first Monday in February. Act of March 23, 1853, authorized the Board to add an additional member to their number by selecting a person who was a stockholder to act as Vice President. The Act of May 2, 1855, changed time of holding election for Board of Directors from first Monday in February to the first Monday in March, between the hours of 10 A.M. and 6 P.M., and increased the minimum shareholding to 50 shares to complete eligibility. Act of March 16, 1863, permitted the Board to add to its number as many additional Vice President members as it deemed expedient; this power was subsequently limited by a General Act, approved March 17, 1869, prohibiting the membership in the Board from exceeding 17 members. On March 6, 1872, an Act of Assembly was approved which provided for holding the annual meeting of the stockholders on Tuesday, March 11, 1873, and yearly thereafter on the second Tuesday of March, and the annual election of Directors on March 25, 1873, and yearly thereafter on the fourth Tuesday of March. The following have served as members of the Board:

Anspach, William, 1867-1879,
 Ayres, William, 1852-1854,
 Bacon, Josiah, 1856-1881,
 *Barnes, William H., 1890-
 1898,
 *Biddle, Alexander, 1874-1898,
 Bodine, Samuel T., 1860-1874,
 Black, George, 1869-1873,
 Brenner, John G., 1857-1859,
 Bringham, John H., 1856-1857,
 Brown, David S., 1847-1852,
 Butcher, Washington, 1849-
 1862 and 1866-1873,
 Carpenter, George W., 1847-
 1858,
 Cass, George W., 1859-1866,

*Cassatt, A. J., 1874-1882 and
 1883-1898,
 Coates, G. Morrison, 1867-1878,
 Colwell, Stephen, 1847-1851,
 *Comegys, B. B., 1887-1898,
 Cope, Thomas P., 1847-1848,
 Corbett, Henry, 1847 (March
 30th to May 17th),
 Craig, Hugh, 1863-1865,
 Cummins, D. B., 1878-1887,
 Curtis, Benjamin T., 1859 (Died
 December 4, 1859),
 Davis, Edward M., 1849-1852,
 Derbyshire, Alexander J., 1851-
 1855 and 1873-1878,
 Derbyshire, John, 1865-1866,

- †Du Barry, J. N., 1882-1892
 (Died Dec. 17, 1892),
 Elkin, Lewis, 1866-1869 and
 1870-1871,
 *Elkins, William L., 1879-1898,
 Farnum, John, 1853-1858,
 Felton, Samuel M., 1873-1884,
 †Foster, William B., Jr., 1853-
 1860 (Died March 4, 1860),
 *Fox, Alexander M., 1871-
 1898,
 Godely, Jesse, 1847-1848,
 *†Green, John P., 1882-1898,
 *Griscom, C. A., 1884-1898,
 Hallowell, Morris L., 1848-
 1849,
 Haupt, Herman, 1856-1857,
 Houston, H. H., 1881-1895
 (Died June 21, 1895),
 Howell, George, 1848-1857,
 Hulme, John, 1858-1867,
 Jeanes, Samuel, 1852-1855,
 Kennedy, John M., 1860-1863
 and 1864-1880,
 Knight, Edward C., 1861-1863
 and 1864-1874,
 Lea, Thomas T., 1847-1852,
 *Little, Amos R., 1888-1898,
 †Lombaert, Herman J., 1864-
 1872,
 Lyon, William M., 1856-1858,
 Magee, James, 1847-1848,
 Martin, William, 1862-1863,
 Megargee, Samuel, 1857-1860,
 Megargee, Sylvester J., 1863-
 1865,
 Mellon, Thomas, 1856-1864,
 †Merrick, Sam'l Vaughan, 1847
 -1852,
 Myers, Joseph B., 1863-1873,
 Miller, J. Craig, 1862-1863,
 *Morris, Effingham B., 1897-
 1898,
 Morris, Wistar, 1858-1890,
 Mott, Edward T., 1852-1855,
 McManes, James, 1880-1881,
 McMichael, Morton, 1869-1870,
 Neal, William, 1854-1856,
 Nimick, Alexander, 1865-1869,
 *Patterson, C. Stuart, 1895-
 1898,
 †Patterson, William C., 1847-
 1852,
 Phillips, Henry M., 1874-1885,
 *†Prevost, S. M., 1897-1898,
 *†Pugh, Charles E., 1893-1898,
 Rice, John, 1865-1873,
 ††Roberts, George Brooke, 1870
 -1897 (Died 1897),
 Robinson, William, Jr., 1852-
 1856,
 Robbins, John, Jr., 1857-1859,
 Rosengarten, G. D., 1858-
 1865,
 Salomon, David, 1863-1864,
 Scott, John (Pittsburgh), 1873-
 1877,
 Scott, Thomas, 1855-1858,
 ††Scott, Thomas A., 1860-1880,
 (Resigned June, 1880),
 Shoenberger, John H., 1848-
 1851,
 *Shortridge, N. Parker, 1874-
 1898,



ALEXANDER M. FOX

| | |
|---|---------------------------------------|
| †Smith, Edmund, 1870-1872 and 1874-1888 (Resigned June 30, 1888), | Thompson, William R., 1852- 1862, |
| Smith, William H., 1860-1865, | Toland, Robert, 1847-1848, |
| Spangler, Christian E., 1847- 1858, | Weigand, John, 1848-1849, |
| Stockton, Robert F., 1848-1849, | Welsh, Henry D., 1878-1896, |
| Thaw, William, 1881-1889 (Died Aug. 17, 1889), | Wetherill, John Price, 1878- 1888, |
| Thomas, Joseph M., 1859-1860, | Wilkins, William, 1848-1853, |
| *††Thomson, Frank, 1882-1898, | Wood, Horatio C., 1859-1860, |
| †Thomson, John Edgar, 1852- 1874 (Died May 27, 1874), | *Wood, George, 1891-1898, |
| | Wood, Richard D., 1847-1848, |
| | Wright, John A., 1847-1848, |
| | Yarrow, John, 1849-1856. |

Those marked thus * are still serving. Those marked thus †
Presidents. Those marked thus ‡ Vice Presidents.

The present Directors are :

Frank Thomson, elected October 1, 1882.

Alexander M. Fox, elected March 8, 1871.

Alexander Biddle, elected March 24, 1874.

N. Parker Shortridge, elected March 24, 1874.

William L. Elkins, elected March 25, 1879.

Alexander J. Cassatt, elected June 29, 1874.

Clement A. Griscom, elected September 24, 1884.

Benjamin B. Comegys, elected November 9, 1887.

Amos R. Little, elected November 18, 1888.

William H. Barnes, elected November 11, 1889.

George Wood, elected March 24, 1891.

Christopher Stuart Patterson, elected July 2, 1895.

Effingham B. Morris, elected December 31, 1896.

John P. Green, elected October 1, 1882.

Charles E. Pugh, elected March 1, 1893.

Sutherland M. Prevost, elected February 10, 1897.

Mr. A. J. Cassatt served as Vice President 1874-1882, when he
resigned.

ALEXANDER M. FOX.

Alexander M. Fox was born October 7, 1824, in the County of
Philadelphia, District of Northern Liberties, and educated in the

private schools of the same. He was brought up in the Dunkard Church, his parents being descendants of that Society; his father served as Treasurer of the Church for seventy years, and for forty years as one of the Deacons. His parents and grandparents were born in Germantown, County of Philadelphia, Pa. While himself not a member of the Church, he always had a strong feeling for the Dunkard Society, but since his marriage has connected himself with the Episcopal Church.

He served his apprenticeship, learning the grocery business on Second street, with Mr. David Adams. At twenty-one years of age he started the grocery business on his own account at 925 North Second street, and remained in business for twenty-five years, when he retired, turning his business over to one of his faithful employees. During that time and up to the present date he has always taken an active part in steam, horse and trolley roads, serving as President of some and Director of others. He has also taken an active interest in many financial institutions, serving for many years as Director of the National Bank of Northern Liberties, and also being one of the active parties in organizing several other banks and trust companies. He has been a Trustee of the Northern Liberties Gas Company for forty-one consecutive years, and at the present time is its President. He has also taken an active interest in the city's welfare by serving as Councilman in both Select and Common Council for five years—from 1864 to 1869—as well as serving in several other honorary positions. During the late Civil War he was one of the most active and determined Union men in this city, and at all times ready with both his time and money to help sustain the Government. At the time of the organization of the Union League in 1863 he became one of its members, and still continues to be an active member. Mr. Fox is generally known by most of the older people of the city, but in the northeastern section, including the old districts of Northern Liberties, Spring Garden, Kensington, Richmond and Frankford, he is known to almost the entire people as being one of its best citizens.

Mr. Fox took an active part in the organization of the Pennsylvania Railroad Company, using his influence with the members of



ALEXANDER BIDDLE

the Board of Commissioners of the District of Northern Liberties to subscribe to the stock of the Company, which they did to the extent of ten thousand shares. He himself has always felt a personal interest in the welfare of the Company. He was elected a Director originally by the City Councils to represent the city's interest as a stockholder. On the purchase by the Railroad Company of the stock held by the city, Mr. Fox was continued as Director of the Company by vote of the stockholders, and he has held the position continuously to the present time.

ALEXANDER BIDDLE.

Alexander Biddle, the son of Thomas Biddle, a well-known financier and grandson of Colonel Clement Biddle, Quartermaster General under General Washington, was born in Philadelphia on the 19th of April, 1819. He is descended from one of the earliest English families to settle in America—a family, too, that has in all its branches been more or less illustrious, serving their country with honor and distinction. After being graduated from the University of Pennsylvania, Mr. Biddle entered the counting-house of Bevan & Humphreys, the largest shipping firm in Philadelphia at that time, and one whose credit and standing in the business world was of the highest character. After four years' service in the counting-house he went as supercargo to Australia, China and Manila. After devoting two years to that service he returned home, and engaged for the four following years in various pursuits. At the end of that period he entered his father's firm, Thomas Biddle & Co., devoting himself to the banking business until the Civil War broke out. He entered the One Hundred and Twenty-first Regiment, Pennsylvania Volunteers, commanded by his cousin, Colonel Chapman Biddle. Chosen as Major of the regiment, he participated with it in all the engagements in the Fredericksburg, Chancellorsville and Gettysburg campaigns, winning his promotions of Lieutenant-Colonel and Colonel respectively. He commanded the regiment at Gettysburg with great credit to himself and the State he represented. After eighteen months of service he returned home, and, retiring from private business pursuits, enlarged his field of usefulness by devoting his time and attention to busi-

ness enterprises of a public character with extensive range. He became a Director in the Pennsylvania Railroad Company March 4, 1874. He is also a Director in the Pennsylvania Company for Insurance on Lives and Granting Annuities, the Philadelphia Savings Fund Society, the Lehigh Navigation Company, the Contributionship Insurance Company, and quite a number of other similar institutions of repute. Upon the organization of the Board of Directors of City Trusts he was chosen a member, and in January, 1882, its President, being the third in succession.

N. PARKER SHORTRIDGE.

N. Parker Shortridge was born in Portsmouth, N. H., November 28, 1829. His father, John Hart Shortridge, was a merchant in Portsmouth. His great-grandfather, Richard Shortridge, was commissioned Captain June 18, 1775, and served in Colonel Enoch Poor's Second New Hampshire Regiment of the Continental Army until his death, on the 8th of July, 1776, at Crown Point, on Lake Champlain. His mother, Margaret Tredick, was a daughter of Captain Henry Tredick, of Portsmouth, N. H. He was educated at the Dover, N. H., Academy. He married Elizabeth J. Rundlet, daughter of John S. Rundlet, of St. Louis, Mo. At the age of sixteen years he entered the counting-house of David S. Brown & Co., of Philadelphia, one of the largest dry goods commission houses for the sale of American cotton and woollen goods then in the country. The counting-room department was at that time under the supervision of Mr. Stephen A. Caldwell, late President of the Fidelity Insurance, Trust and Safe Deposit Company, of Philadelphia. Mr. Shortridge's time was largely occupied for nearly two years in collecting notes and doing the outside banking business of the house, which was very large, the firm having charge of the cash accounts of many jobbers in the important cities of the West. He was then promoted to the print-sales department, where he soon took a prominent position, steadily advancing and making many valuable and lifelong friends, both among consignees and purchasers. He was active and untiring, working frequently from twelve to sixteen hours per day. After remaining in the house of David S. Brown & Co. twelve years,



N. PARKER SHORTRIDGE

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he, with George F. Peabody and George W. Harris as general partners, and J. W. King, Charles S. Peaslee and William Woodnut as special partners, organized the firm of George F. Peabody & Co., to carry on a similar business, which they confined, however, to the production and sale of printed calicoes. At the end of five years George F. Peabody and the three special partners retired from the concern.

In 1864 Mr. Shortridge, with George W. Harris, Edward P. Borden and James H. Peabody, organized the firm of Harris, Shortridge & Co., to succeed the old firm. This partnership continued for three years, when, in 1867, it was succeeded by Shortridge, Borden & Co., from which Mr. Shortridge retired in 1877, Edward P. Borden, John H. Shortridge and Isaac H. Dietrich, the remaining partners, continuing the firm and business under the same name.

In 1878 Mr. Shortridge spent five months in travel in Europe, being the first real vacation that he had ever taken. He was elected a Vestryman of the Church of the Redeemer, Bryn Mawr, in April, 1860, and Senior Warden four years later, and has served as Lay Deputy to the Diocesan Convention since that time.

In 1867 he was elected a Director of the Philadelphia National Bank; he served on the committee with Henry D. Welsh and Thomas G. Hood in securing subscriptions to the stock and bonds of the American Steamship Company, of which he was later elected a Director. In 1868 he was elected a member of the Executive Council of the Philadelphia Board of Trade, serving as Chairman of the Committee on Inland Transportation, and has been Fourth Vice President since the death of Henry Winsor, October 28, 1889. In 1873 he was elected a Director of the Delaware Mutual Safety Insurance Company of Philadelphia. On the organization of the United States Centennial Exposition he was among the first to take an active part in securing subscriptions to the stock of the Centennial Board of Finance, acting as Chairman of the Committee on Dry Goods, with Amos R. Little, Jacob Riegel, T. B. P. Dixey and Charles B. Williams, and this committee proved to be one of the most successful in raising the capital stock of the Centennial Board of Finance.

In 1873, on the organization of the United States Centennial Board of Finance, he was elected a member of that Board, and was annually re-elected until the affairs of the Board were finally closed in the autumn of 1893, under the authority of the Act of Congress of June 6, 1892.

Mr. Shortridge is a Manager of the Merchants' Fund, one of Philadelphia's noblest charities. In 1881 he was elected a Trustee of the Penn Mutual Life Insurance Company, in which he takes a very warm interest. He assisted in the organization of the New England Society of Pennsylvania, and has served as a Director and Vice President. In 1890 he was appointed by the President Judges of the Court of Common Pleas of Philadelphia a Manager of the Western Saving Fund Society of Philadelphia, to fill the vacancy created by the death of his warm friend, John Price Wetherill. He is a Director of the Mortgage Trust Company of Pennsylvania. At the annual election of the Pennsylvania Railroad Company in 1874, Mr. Shortridge was elected a Director. He has served on the Road and Incidental Committees, and is now Chairman of the Finance Committee and the Insurance Committee, and is one of the Managers of the Trust Fund created October 9, 1878; he is a Trustee of the General and Consolidated Mortgages, of the Sinking Fund of the Consolidated Mortgage, and of the Philadelphia, Wilmington and Baltimore Railroad Company's Sinking Funds; he is a Director and Chairman of the Finance Committee of the Philadelphia, Wilmington and Baltimore Railroad Company, a Director of the West Jersey Railroad Company, of the Northern Central Railway Company, of the Pennsylvania Company, the Manor Real Estate and Trust Company, and of many other corporations owned or controlled by the Pennsylvania Railroad Company. Mr. Shortridge is President of the Trenton Delaware Bridge Company and of the Philadelphia and Erie Railroad Company, and he is also a member of the Advisory Committee of the Pennsylvania Railroad Branch of the Young Men's Christian Association.

In this connection it will be of interest to say that Mr. David S. Brown was, with Mr. Richard D. Wood (the father of Director George Wood), among the most active merchants of the time, and a member of the Board of Trade, and the mover of the first resolu-



W. L. ELKINS

tion, seconded by Mr. Frederick Fraley, the venerable President of the Philadelphia Board of Trade, which was presented to the large and enthusiastic meeting held in the Chinese Museum, April 27, 1846, advocating the subscription by the City Councils to the stock of the Pennsylvania Railroad Company, of which Company he served as a Director from 1847 to 1852.

WILLIAM L. ELKINS.

Mr. Elkins was born May 2, 1832, in Western Virginia. He came to Philadelphia with his parents to reside in 1840. Being of a very studious disposition and devoting his spare time to the acquisition of knowledge, he may be said to be a self-educated man. All the teaching he had was in the public schools that he attended until he was fifteen years old. At that age he found employment as a clerk in a store, after which he engaged in the lumber and produce business respectively; he had succeeded so well by application and energy that in 1860 he was at the head of the largest produce business conducted by any individual or firm in the City of Philadelphia. His ambition ran upon larger operations, and resulted in turning his mind to the production and refining of petroleum. Mr. Elkins then sold out his produce business, and located in the oil fields of Pennsylvania, and became very successful. Having thoroughly studied the situation and the possibilities, he concluded, with the keen judgment by which he is characterized, that the most profitable and surest department of the oil business was in the refining of the crude product.

Returning to Philadelphia, he soon became, by purchase, lease and erection of refineries, one of the largest manufacturers of refined petroleum in the country, whilst at the same time a producer of no small magnitude. He developed the uses of oil in many directions, notably in the manufacture of purer and cheaper gas. In promoting companies for the latter purpose he became identified with the gas interests of many cities and towns throughout the country. It was at his works in Philadelphia that gasoline was first manufactured. In May, 1875, he formed a limited co-partnership for a period of ten years with the Standard Oil Company, that Company purchasing one-half interest in his business, but before

the expiration of the term of partnership, or in 1880, the Standard Company purchased Mr. Elkins' remaining interest, he retiring from active participation in the business, still retaining his interest in the stock of the Company. Mr. Elkins then turned his attention to other extensive business enterprises, notably the development of convenient and rapid transit in our large cities through the medium of street railways. The great progress that has been made in that service is largely due to his unceasing activity and great ability. Mr. Elkins has added very largely to the beauty and wealth of Philadelphia by his investments in building operations and his assistance in furthering the erection of industrial establishments. He was appointed Colonel on the staff of Governor Hartranft, and a Commissioner from Philadelphia to the Vienna Exposition in 1873. Mr. Elkins, though very decided in his political opinions, and an active member of the Union League, has never held public office, and possesses no desire to do so. He is eminently a business man of rare ability and sagacity. He was elected a Director of the Pennsylvania Railroad Company, March 25, 1879, and appointed Chairman of the Incidental Committee. He is also an active Director in many enterprises at home and abroad; among these are the Philadelphia and Erie Railroad Company, the Camden and Atlantic Railroad Company and the Union Traction Company, of Philadelphia.

A man of remarkable executive ability and great capacity for work, Mr. Elkins' success in life is due to his close attention to details whilst directing great enterprises and to his quick perception and correct understanding of business conditions. He is a man of refined and quiet tastes, of hearty manner, kindly disposition and domestic habits.

ALEXANDER J. CASSATT.

Alexander Johnston Cassatt was born in Pittsburgh, Pa., December 8, 1839. His father, Robert S. Cassatt, was for a number of years closely identified with the financial and industrial interests of Western Pennsylvania, and was the first Mayor of Allegheny City. Mr. Cassatt's primary education was received in the schools of Pittsburgh, but while he was yet a lad his father removed to Europe, and he secured in the continental schools not only an intimate knowledge of modern languages, but also the advantages of a lib-



A. J. CASSATT

eral course of study in the University at Darmstadt. Upon his return to America he entered the Rensselaer Polytechnic College at Troy, N. Y., from which institution he was graduated in 1859 as a civil engineer.

Immediately after his graduation Mr. Cassatt entered upon the active pursuit of his chosen profession, and accepted a position on the location and construction of a railroad line in Georgia. Just before the outbreak of war he surrendered his engagement in the South and settled in Philadelphia, having in 1861 been appointed a rodman on the Philadelphia Division of the Pennsylvania Railroad. Two years later, when the construction of the Connecting Railway, linking the Pennsylvania to the Philadelphia and Trenton Railroad, was begun, he was assigned to the engineer corps engaged in that work, with the title of Assistant Engineer. The ability shown in this post attracted the notice of his superiors, and when, in 1864, the Pennsylvania assumed control of the Philadelphia and Erie Railroad, Mr. Cassatt was transferred to Renovo and intrusted with the more important duties of Resident Engineer of the Middle Division. Mr. Cassatt, after serving for a short time as Superintendent of the Warren and Franklin Railroad, was, in April, 1866, transferred to Williamsport, with the title of Superintendent of Motive Power and Machinery of the Philadelphia and Erie Railroad. For one year and a half he held this position, and in November, 1867, was appointed to a like position on the Pennsylvania Railroad, with headquarters at Altoona. On April 1, 1870, Dr. Edward H. Williams, now a prominent member of the well-known firm of Baldwin & Co., locomotive builders, resigned the position of General Superintendent of the Pennsylvania Railroad. Mr. Cassatt was selected to succeed him, and subsequently, upon the leasing of the United Railroads of New Jersey in December, 1871, he was made General Manager of all the Pennsylvania Railroad lines east of Pittsburgh and Erie, an office of which he was the first incumbent. This promotion necessitated his transfer to Philadelphia.

After the death of the President of the Pennsylvania Railroad Company, Mr. J. Edgar Thomson, a reorganization of the higher officials became necessary, and Mr. Cassatt was, on July 1, 1874, advanced to the position of Third Vice President, which office he

filled until June 1, 1880, when, upon the retirement of Colonel Thomas A. Scott, then President of the Company, and the accession to the Presidency of Mr. George B. Roberts, he became First Vice President. In both the Vice Presidential posts Mr. Cassatt continued to display that high order of ability which had marked his entire career.

On September 30, 1882, he voluntarily resigned his office and retired to private life. In his letter of resignation he wrote: "My only object in taking this step is to have more time at my disposal than any one occupying so responsible a position in railroad management can command. If I were to remain in active railroad life I could not desire a position more agreeable to me than the one I now occupy, nor would I be willing to connect myself with any other company than the one in whose service more than twenty-one years of my life have been passed."

On September 12, 1883, he was elected a Director of the Pennsylvania Railroad Company, to succeed the late Samuel M. Felton, and was subsequently appointed Chairman of the Road Committee.

On February 17, 1885, he was elected President of the New York, Philadelphia and Norfolk Railroad, which position he continues to fill.

In the spring of 1891, when the projected Inter-Continental Railway, to connect North, Central and South America, had received the indorsement of the International American Conference and become existent, President Harrison appointed Mr. Cassatt one of the three Commissioners on the part of the United States. Upon the organization of the Commission he was unanimously elected its President.

In addition to his railroad and other duties, Mr. Cassatt finds time to discharge the duties of Supervisor of Lower Merion Township, Montgomery County, Penna., in which township he resides. He was first elected to this office in 1881, and has been re-elected continuously each year since that time.

CLEMENT A. GRISCOM.

Clement Acton Griscom, son of Dr. John D. Griscom and Margaret Acton Griscom, was born in the City of Philadelphia on the



C. A. GRISCOM



B. B. COMEGYS

15th of March, 1841. His rudimentary education was received at home, in a Friends' School, and after two years in the Central High School he completed his studies at the Friends' Academy. Upon leaving school, at the age of sixteen, he entered the old-established shipping house of Peter Wright & Sons as clerk. Displaying great ability and energy in connection with his close attention to business, he advanced so rapidly that in 1863, when but twenty-two years of age, he was taken into the firm as a partner. Since then, through his energy, constancy and enthusiasm he has become one of the most prominent managers of ocean steamship interests in the world. He is now President of the International Navigation Company, which owns and operates the magnificent fleet composing the American and Red Star Lines, which lines aggregate a greater tonnage in the North Atlantic trade than any other steamship company engaged in that traffic. No one has done more than Mr. Griscom to promote the safety and comfort of ocean travel, and in devising and establishing further improvements in that direction. His position in the ocean steamship business, with its inter-continental traffic, does not occupy his whole time, a portion being devoted to railroad, banking and insurance interests. Mr. Griscom is President of the American Society of Naval Architects, also an honorary member of the British Institute of Naval Architects. Mr. Griscom was elected a Director of the Pennsylvania Railroad Company September 24, 1884, and appointed a member of the Road Committee October 8, 1884.

He is a club man in the larger and more generous sense, but finds his greatest relief from business cares in hospitable social life, also in agricultural pursuits on his farm in Montgomery County, Penna., in raising fine stock, in which he is very much interested.

BENJAMIN B. COMEGYS.

Benjamin B. Comegys was born at Dover, Del., May 9, 1819, and received his education at the public school in a country district near the place of his birth. In January, 1837, after his father's inauguration as Governor of the State of Delaware, Mr. Comegys came to Philadelphia and entered upon a mercantile life. At that time he was not quite eighteen years of age. For eleven years he

served in certain Market street counting-houses, the greater part of the time, however, being passed with the old dry goods firm of Thomas C. Rockhill & Co. In May, 1848, he entered what is now the Philadelphia National Bank as a junior clerk, and passed through the various stages to the Presidency, a position he still holds. He was elected Cashier in August, 1851, Vice President in 1866, and President in 1880. In 1869 he was elected a Director of the Philadelphia Trust, Safe Deposit and Insurance Company, and Vice President in 1890. He has been a member of the Clearing House Committee of Banks since 1858, and is the only surviving original member of that Committee. The Judges of the Court of Common Pleas appointed him in 1875 a Manager of the Western Saving Fund Society, and in 1881 a Director of the Board of City Trusts having charge of Girard College. In May, 1873, the Mayor of Philadelphia appointed him a Manager of the House of Refuge. Upon special invitation he addressed the National Bankers' Association at Saratoga in 1884, and at Baltimore in 1894. Of his subjects, one was "Safe Banking," the other, "Paper Currency." Mr. Comegys was elected a Director of the Pennsylvania Railroad Company November 9, 1887, and made a member of the Finance Committee.

Mr. Comegys is a Presbyterian, and one whose broad conception of Christianity makes the world the field for his labors of love in training the young to ways of honor and usefulness, and raising up the fallen by holding out the helping hand. Mr. Comegys is one of the Advisory Board of the Pennsylvania Railroad Department of the Young Men's Christian Association of Philadelphia, an institution which means so much for the welfare of the employees and the best interests of the Company.

AMOS R. LITTLE.

Amos Rogers Little, the son of Edward P. Little and Edy Rogers Little, was born in Marshfield, Mass., July 27, 1825. He descends from patriotic and Pilgrim stock on his paternal side, and from John Rogers, the most famous of the martyrs of the Reformation, on the maternal side. Being the son of a well-to-do New England farmer, he led the usual life of those so situated, going to school in the



AMOS R. LITTLE

neighborhood for a time, then studying in a Quaker school in Providence, Rhode Island, and finishing in a school at Sandwich, Mass. At nineteen years of age, having acquired an excellent education, he decided to enter upon a mercantile career, and came to Miletown, near Philadelphia, and accepted a situation as clerk in a country store, where the pay allowed for his services was \$5 per month and his board. His intelligence, integrity and energy soon made him the master of the business, and enabled him to secure a position at the end of the year in Philadelphia, in Maynard & Hutton's wholesale commission house on Market street, at a salary of \$300 per annum. He remained with that firm for three years, they showing their appreciation of the value of his services by steadily increasing his pay. This enabled Mr. Little to go into business in 1849 on his own account, by forming a partnership with his brother-in-law and entering the dry goods commission line, the firm name being Little & Peterson. The firm name was changed a number of times between 1849 and 1873, at which latter time it became Amos R. Little & Co. The house always stood number one in commercial and financial circles, and passed unscathed through the several financial crises that have occurred during Mr. Little's active business life—crises which swept many business houses into bankruptcy. Mr. Little's word was always as good as his bond, and passed current wherever given, which accounts for his almost phenomenal success.

He retired from business in 1883. His principal recreations during his business life were found in gunning and fishing, at which he was very skillful and extremely fond. In his boyhood he had been the frequent companion of Daniel Webster in these sports. Mr. Little, upon retiring from business, made a tour of the world, accompanied by his wife, during which they visited the Sandwich Islands, New Zealand, Tasmania, Australia, China, Japan, Java, Egypt, Palestine, and the principal European cities.

A sturdy Republican in principle, Mr. Little has always advocated reform in municipal affairs, and been independent enough to vote for the best man for the interests of the municipality. His known integrity and high plane of duty rallied around him a formidable and genuine body of reformers when he planned and suggested the Committee of One Hundred.

He was always foremost in bringing Philadelphia to the front, as was instanced in the zeal, energy, time and money he gave to make the Centennial Exhibition a success. He was a member of the Board of Finance of that Exhibition, and Chairman of the Committee on Admissions. In 1887 he was appointed by Governor Pattison the Pennsylvania member of the United States Commission having in charge the celebration of the Constitutional Centennial at Philadelphia, and was selected by that body as the Chairman of its Executive Committee. The success of the celebration was largely attributed to the zeal, industry and ability displayed by Mr. Little in conducting the affairs incident to the position, and it is to his great credit that, whilst nothing was left undone to make the celebration a complete success, he was enabled through his complete mastery of details to return to the State Treasury a portion of the money appropriated by the Pennsylvania Legislature, and to the citizens of Philadelphia 50 per cent. of the subscriptions they had made to insure a creditable celebration.

The death of John Price Wetherill causing a vacancy in the Board of Directors of the Pennsylvania Railroad Company, on November 28, 1888, the Board, in recognition of Mr. Little's fitness, his personal integrity, high business ability and standing, elected him to fill that vacancy, and subsequently appointed him a member of the Road Committee.

WILLIAM H. BARNES.

William Henry Barnes was elected a Director of the Pennsylvania Railroad Company December 11, 1889, and made a member of the Finance Committee, succeeding William Thaw, deceased.

Mr. Barnes was born in the City of Philadelphia July 12, 1829. He was educated in private schools in that city, notably the Friends' School on Fourth street, between Chestnut and Walnut streets. His parents were of New England—the father of Marlboro, Mass., the mother of New Britain, Conn.

Mr. Barnes entered the service of the Pennsylvania Railroad Company in March, 1848, joining the Engineer Corps at Greensburg, Pa., then commencing the second year of the surveys for the location of the road west of the Allegheny Mountains. He re-



W. H. BARNES

mained in that service until the road was completed by connection with the State Road at Hollidaysburg and Johnstown, respectively, and opened for traffic between Philadelphia and Pittsburgh.

In May, 1858 (residing in Pittsburgh), he entered the service of the Pittsburgh, Fort Wayne and Chicago Railroad Company as Assistant Superintendent. He remained in that service, filling, by promotion, other important positions, until that road, after having been for several years in the hands of a Receiver, was sold out under foreclosure proceedings, and reorganized as the Pittsburgh, Fort Wayne and Chicago Railway Company, Mr. Barnes at that time being Comptroller of the Company.

He was one of the charter members of the Pennsylvania Company, and a member of the first and succeeding Board of Directors, which Company, in April, 1871, took charge of the Pittsburgh, Fort Wayne and Chicago Railway and the Pittsburgh, Columbus, Cincinnati and St. Louis Railroad, and their Western connections, in the interests of the Pennsylvania Railroad Company, as the "Pennsylvania System West of Pittsburgh."

Prior to 1871 Mr. Barnes was associated with the management of the Union Line and the Empire Line—fast freight service of the Pennsylvania Railroad lines.

He was elected Treasurer of the Pennsylvania Company in 1871, and held that office until February, 1883, when he resigned on account of ill health, going abroad for that year.

Returning, he took up his residence in Philadelphia. May 8, 1884, Mr. Barnes was appointed one of the Receivers of the Allegheny Valley Railroad Company, along with John Scott, the then President of that Company. Mr. Scott died March 24, 1889, Mr. Barnes remaining sole Receiver, and until February 29, 1892, when the road, having been sold on December 15, 1891, under foreclosure proceedings, was reorganized as the Allegheny Valley Railway Company, Mr. Barnes being elected President of the new Company, which position he continues to hold.

Mr. Barnes is a Director of a number of corporations affiliated with the Pennsylvania Railroad system. He is a Director of the Erie and Western Transportation Company—Anchor Lake Line—also of the International Navigation Company—American and Red

Star Steamship Lines. He is also a Director of the Third National Bank of Philadelphia.

It will be seen that Mr. Barnes has been for forty-eight years associated with the interests and affairs of the Pennsylvania Railroad Company. He has seen the Stage Coach and Canal Packet Lines, on which he journeyed between Philadelphia, Greensburg and Pittsburgh in 1848, superseded, step by step, rail after rail, by the great Pennsylvania Railroad lines, reducing the experience of three days' travel to Pittsburgh to nine hours—from a stage coach "nine inside" to a moving vehicle six times nine inside, and "with all the comforts of a home."

GEORGE WOOD.

George Wood was elected a Director of the Pennsylvania Railroad Company in 1891 to succeed the late Wistar Morris, who was so long and actively connected with the Board. He is the son of the late Richard D. and Juliana Randolph Wood, and was born at 1121 Arch street, in Philadelphia (now part of the site of the Reading Terminal) on July 1, 1842.

In early youth, while he was attending school in Philadelphia, his vacations were spent on a large farm owned by his father near Lyonville, in Chester County, where he acquired the interest in agricultural pursuits and love of country life which he still retains. He spent two years at Westtown Boarding School, and completed his education at Haverford College in 1859, when he entered the counting-house of Wood & Garrett, manufacturers of cotton goods, and on coming of age, in 1863, was admitted to a partnership in the firm.

In the following year Mr. Wood removed to Millville, N. J., where he remained seven years as managing partner of the business of his own firm, improving and enlarging all the departments of the cotton manufacturing plant then existing, including the construction of a dam across Maurice River, thus creating a beautiful expanse of water, known as Union Lake, which affords an attractive local pleasure resort for the people of Cumberland County. He organized and erected an establishment for bleaching, dyeing and finishing cotton cloths, which has been so successful as to draw



GEORGE WOOD

large quantities of goods from New England to be prepared for the market, and supervised the other industries commenced by his father, as well as representing him in the development of the town of Vineland, the site of which, with the surrounding country, embracing an area of 20,000 acres, Richard D. Wood had sold to Charles K. Landis, the founder of the place. At the same time he was also engaged in making available the water power afforded by the Great Egg Harbor River at May's Landing, and constructing a cotton mill at that place, which has grown to be an important manufacturing point. He also incorporated the small gas works at Millville, originally built to serve the mill, into a stock company to supply the town, and from time to time added a water works, an electric light plant, and, later, a trolley road in the city of Millville, and connecting it with Bridgeton, a county seat ten miles distant, affording the residents of the rich agricultural section of Salem and Cumberland Counties an outlet to the seashore lines on the West Jersey Railroad.

When he went to reside in New Jersey he became a Director of the Millville and Glassboro Railroad Company, and his first railroad experience was with this line. When it was merged into the West Jersey Railroad Company he was elected a Director in the latter, and has ever since continued to serve in the Board. He has for many years been Chairman of the Finance Committee, and was also Chairman of the Trustees of the Sinking Fund for the redemption of the million dollar mortgage bonds, which were paid off on January 1, 1896.

Mr. Wood returned to Philadelphia in 1871 with a view to making it his permanent residence, taking up again the commercial end of the business with the same activity he had manifested in expanding the productive department, and the house is now one of the largest in the city engaged in distributing cotton goods.

In 1880 Mr. Wood was elected President of the West Jersey and Atlantic Railroad Company, which he was largely instrumental in organizing, for the purpose of giving the West Jersey Railroad access to Atlantic City, and took the oversight of its affairs during its construction until ready for operation, when it was leased to the West Jersey Railroad Company. In 1882 he negotiated the pur-

chase of the Pleasantville and Ocean City line, which was subsequently merged into the West Jersey and Atlantic Railroad Company.

In addition to the duties imposed upon him by his connection with railroad management, in which he takes active interest and discharges with fidelity, Mr. Wood is President of the Millville Manufacturing Company and the May's Landing Water Power Company, and ranks as one of the leading and influential manufacturers in his native city. He is also President of the Philadelphia Manufacturers' Mutual Fire Insurance Company, and a Director of the Philadelphia National Bank and other corporations.

Mr. Wood traces his ancestry on the side of his father to Richard Wood, of Bristol, England, who emigrated with his son James in 1682, and came to Philadelphia with William Penn. Richard Wood's name appears as a member of the first Grand Jury summoned in Pennsylvania. His grandson, also named Richard, married the daughter of Benjamin Bacon, who lived at Greenwich, in Salem County, N. J., which had been chosen by Thomas Chalkley as the site for another colony of Quakers, because of its remoteness from the troubles with the Indians at that time occurring in the western part of Pennsylvania. When Cumberland County was organized from this portion of Salem County Richard Wood was appointed by the Governor as one of the three Judges of the new district.

His great-grandson, Richard D. Wood, father of George Wood, and the fifth in direct descent in America to bear that prenomem, came to Philadelphia at the age of twenty-three and engaged in mercantile business on Market street, between Second and Third, founding the firm of Wood & Abbott (which afterwards became Wood, Bacon & Co.), and was soon regarded as a prominent citizen. One of the first marks of public appreciation of his character and abilities was his election as a Director of the Girard Bank in 1831, and later of the Philadelphia Bank. He was also a Director in the Insurance Company of North America, Allentown Iron Works, Schuylkill Navigation Company, and many other industrial and financial corporations, including the Union Benevolent Society; founded the cotton manufacturing plants of the present Millville

Manufacturing Company and the May's Landing Water Power Company; the foundries at Millville and Florence, N. J., and created the firm of Wood, Morrell & Co. (the active members of which were himself, his brother, Charles S., and Daniel J. Morrell), which, during 1855, 1856 and 1857, a period of great depression, when the Cambria Iron Company was deeply involved in debt, took charge of the works, resuscitated and reorganized the business, and after discharging all the indebtedness, turned the control over to the Company again. He also organized and built the Millville and Glassboro Railroad, employing Mr. George B. Roberts to make the survey and act as Constructing Engineer. As a contrast to present methods it may be remarked that Mr. Wood purchased the rails in the shape of pig iron, which the Engineer had rolled by Mr. Haywood at Pottstown, thus obtaining a superior article to what could have been purchased by contracting for finished rails. It was also largely due to his energy and persistence that the link connecting Glassboro with Camden and the extension from Millville to Cape May were undertaken and completed, forming the present West Jersey Railroad, the first train to bring passengers to Camden being run on September 3, 1860. The 22 miles of road from Millville to Glassboro were built and equipped for \$160,000.

When in 1846 it was proposed to construct what was then called the Central Railroad (now the Pennsylvania Railroad) from Harrisburg to Pittsburgh, it was natural that Richard D. Wood should be deeply interested in the project. At the outset he not only subscribed \$20,000 to the stock, but took a very active part in forming committees to solicit subscriptions from individuals, corporations and the city, inducing by his personal efforts the Philadelphia Bank and the Insurance Company of North America, amongst others, to take a liberal amount of stock, making frequent trips to Harrisburg to secure the necessary legislation, and striving by every means in his power to bring the matter to a successful issue.

In recognition of the great services he had thus rendered, Richard D. Wood was made a member of the first Board of Directors of the Pennsylvania Railroad Company and the Finance Committee, and in this capacity employed J. Edgar Thomson as Chief Engi-

neer, and was active in making contracts for construction of the line and providing the funds for defraying the cost.

Mr. Frederick Fraley, in writing for the Board of Trade, of which Mr. Wood, Sr., was for a long period a member, said: "The labors and influence of Mr. Wood were felt in almost every undertaking having for its object the advancement of the material prosperity of Philadelphia and vicinity. He was at critical periods in their history a powerful supporter of the Schuylkill Navigation Company, promoting confidence in it by liberal subscriptions to its stock and loans when they were looked upon with suspicion and doubt, and at another of the Pennsylvania Central Railroad when it was of the most critical importance that its then President (Samuel V. Merrick) should be seconded, as he was, in his efforts to carry forward to completion that great undertaking by men in its directorship of such personal influence, fertility of resource and force of character as Mr. Wood. The magnitude and difficulty (at that time) of this great work have been overshadowed and obscured by the exciting events and public emergencies of the past few years, and the obligations of the public to those who, with such fortitude and courage as is scarcely equalled, sustained in that trying time the burden of its progress and completion, are but imperfectly appreciated."

The maternal ancestry of Mr. George Wood, the subject of this sketch, were also entitled to consideration.

Edward Fitz Randolph came from England to Scituate, Massachusetts, about the year 1630, and in 1634 is recorded as the owner of a house and lot there. He was married on May 10, 1637, to Elizabeth Blossom, daughter of one of the Puritans who left England, on account of religious persecutions, for Leyden, in Holland (where she was born), and who sailed for America in the "Speedwell" in 1620, but afterward returned to Leyden, and again came to Plymouth in 1629, and was one of the first two deacons elected in the Church.

In 1676 Edward Fitz Randolph, with his family, removed to Piscataway, in the (then) Province of New Jersey, and their descendants have ever since been prominent in the social and political history of that State. One of his grandsons, Nathaniel, gave to



C. STUART PATTERSON

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Princeton College the ground on which it stands, and assisted in laying the corner-stone in November, 1755. Another grandson, also named Edward, in 1704 married Katherine, daughter of Richard Hartshorne, one of the joint proprietors with William Penn and the Duke of York of the Province of East New Jersey, which comprised that section of the present State lying between the Atlantic coast and a boundary drawn from Great Egg Harbor north-westwardly to a point on the Delaware at or near Trenton. This Richard Hartshorne was born in Leicestershire, England, on October 24, 1641, and emigrated to New Jersey in 1669, becoming the owner of Sandy Hook under a grant made to him in 1677. He was a member of the Society of Friends, and encouraged immigration to the Province by circulating in England information regarding the new country. He became a member of the Governor's Council in 1684, and aided successive Governors in the same capacity for many years, being also elected to the General Assembly, of which he was chosen Speaker.

A son of the Edward Randolph who married Katherine Hartshorne was also called Edward (the fourth of that name in direct descent from the original Puritan immigrant), and became a captain in the Revolutionary Army. He took part in the battles of Trenton, Princeton, Brandywine, Germantown, Monmouth, etc., and shared in the hardships and privations encountered in the winter campaign at Valley Forge, narrowly escaping death at the massacre of Paoli.

After the war was ended he settled in Philadelphia, and with Josiah L. Coates engaged in the West India shipping trade, and his granddaughter married Richard D. Wood.

Nathaniel Allen, another ancestor, emigrated from Bristol, England, in 1681, as one of the Commissioners, with Col. William Markham and others, from William Penn, to confer with the Indians in respect to grant of lands, and confirm with them a League of Peace, and to arrange other matters preparatory to his coming.

C. STUART PATTERSON.

Mr. C. Stuart Patterson was born in the City of Philadelphia on June 24, 1842. He is a son of the late Joseph Patterson, who was

for over forty-five years President of the Western National Bank. Mr. Patterson, upon the completion of his studies in 1857 in private schools, entered the Sophomore Class of the University of Pennsylvania, and was graduated from that institution in 1860. He studied law under the late Chief Justice Sharswood at the University, and finished his professional course of study under the preceptorship of the late Hon. William A. Porter. Mr. Patterson served in the Union ranks during the late Civil War, being Sergeant in Captain Landis' Battery. He was wounded at Carlisle in July, 1863. In 1865 Mr. Patterson was admitted to the Bar; his success in his profession has been steady and conspicuous. In 1887 he was appointed Professor of Real Property and Conveyancing in the Law School of the University of Pennsylvania, succeeding the late E. Coppee Mitchell, deceased. Subsequently, when Judge Hare resigned the Law Professorship of the University, Mr. Patterson was appointed to fill the vacancy in the Chair of Constitutional Law, and subsequently was elected Dean of the Law School. On July 2, 1895, Mr. Patterson was unanimously elected a Director of the Pennsylvania Railroad Company, and made a member of the Road Committee, to fill the vacancy caused by the death of Mr. H. H. Houston. Mr. Patterson has given to the literature of his profession a number of important works, among them being a "Memoir of Theodore Cuyler," "The Railroad Accident Law," "The Liability of Railways for Injuries to the Person," and "Federal Restraints on State Action." In recent years Mr. Patterson has been an active participant in the Republican campaigns, and his force as a public speaker has been generally recognized. He is a Director in the Union League. Besides his many other engagements, Mr. Patterson serves actively as Vice President of the Western Sayings Fund. Mr. Patterson is a keen sportsman in the best sense of the word. He has always been identified with the game of cricket in Philadelphia—indeed, before the war he was a player of marked ability.

EFFINGHAM B. MORRIS.

Mr. Effingham B. Morris, a well-known lawyer of Philadelphia, was elected December 31, 1896, to be a Director in the Pennsylvania Railroad Company, to fill the vacancy caused by the death

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EFFINGHAM B. MORRIS

of Mr. Henry D. Welsh. He is a son of Israel W. Morris, a mining engineer of high standing, who is President of the Locust Mountain Coal Company and other coal mining corporations connected with the Lehigh Valley Railroad, and a nephew of the late Wistar Morris, for many years, and at the time of his death, one of the most prominent Directors of the Pennsylvania Railroad Company. He comes of a stock identified with the city from its foundation, his direct progenitor, Anthony Morris, having been a Justice of the Supreme Court under William Penn in 1692 and the second Mayor of the city. His great-great-grandfather was Captain Samuel Morris of the First City Troop during the Revolution, and all the descendants have been of standing in the community in their day.

Mr. Morris was born in Philadelphia August 23, 1856, in the old Morris house on Eighth street below Walnut, which at intervals of a generation has twice been occupied by four generations of the family at the same time. He was graduated from the University of Pennsylvania in 1875, and practiced law in association with P. Pemberton Morris, LL.D., to whose practice he succeeded at the latter's death. He was General Attorney for the Lehigh Valley Railroad Company for some years, and Solicitor for the Girard Trust Company until his election as President of that Corporation. He served as Receiver, with Frederick Fraley, of the Schuylkill Navigation Company, and arranged the settlement of that Company's affairs in the reorganization of the Reading Railroad Company of 1888. In 1880 he was elected to City Councils from the Eighth Ward as the candidate of the Committee of One Hundred, and served with credit for two years. In 1883 he was elected to the Gas Trust, then the most powerful political organization in the city. His course in the Trust was marked by thorough independence, but through his personal tact he was enabled to accomplish some practical changes in the methods of that body, and at the same time retained the friendship of those who were opposed to him politically. The voucher system of payment of bills and contracts was devised and introduced by him into that branch of the city's business, and is still in use.

He was elected to the Presidency of the Girard Trust Company

in 1887, since which event the Company erected its office building at Broad and Chestnut streets, and its prosperity there has demonstrated the wisdom of his choice of site, although at the time the locality was not generally considered available for such purposes. The business of the Company has increased under his management from deposits of one million to eight millions, and its trust estates now aggregate some thirty millions of active trusts, not including many additional millions of corporation mortgages, under which it is trustee.

When the Pennsylvania Steel Company, employing some eight thousand hands, became embarrassed in 1893, the Girard Company was appointed its Receiver, in conjunction with Major Bent, and Mr. Morris was Chairman of the reorganization committee, which successfully restored the Company to solvency. As part of the reorganization plan, he became President for the first year of the new Company's existence. He still remains upon its Board, and, with C. Stuart Patterson and Colonel John Cassels, of Washington, a member of its finance and executive committees.

Mr. Morris has been a Director of the Union League for three years, retiring under the rule confining the length of service to that term, and is a member of the Philadelphia Club, the University Club, and others. He is a Manager of the Pennsylvania Hospital, where he succeeded his uncle, the late Wistar Morris, and is a Manager of the Philadelphia Saving Fund Society and other corporations. He has exceptional ability for disposing of work, and getting through with whatever he has in hand at the moment by attending steadily to that until it is finished, and then being able to turn to the next one of his many occupations without apparent difficulty, and always with successful results.

GENERAL OFFICE DEPARTMENT.

The almost numberless directions in which the management of great railroad corporations must give its time and attention to bring about that success which secures proper returns to stock and bondholders, and preserves and advances the standard of excellence of the property committed to its care, make necessary a comprehensive division of labor in the General Office Department. This is



JOHN P. GREEN

nowhere felt to be more necessary than in the organization of the Pennsylvania Railroad Company ; and in consequence the President, himself a trained railroad man, is assisted in managing the affairs of the corporation by three Vice Presidents, a first assistant, and two assistants, each of whom has had long and careful training in the service.

The First Vice President, under the direction of the President, is the executive officer of the Company, and has an especial oversight of the Secretarial, Treasury and Accounting Departments, and assists the President in matters connected with the operation and management of the railroads controlled directly or indirectly by the Company west of Pittsburgh, and in all matters relating to the railroads in which the Company may have an interest.

John Pugh Green, the First Vice President of the Pennsylvania Railroad Company, was born in the City of Philadelphia on the 31st day of July, 1839, and educated in the schools of that city, graduating with honor from its High School. Whilst attending the latter, among the studies to which he paid close attention was stenography, in which branch he received the credit of being the brightest scholar. The mental discipline necessary to acquire the art, added to the wide field of knowledge it opened, had a marked influence on his life, and no doubt opened the door to his success. After graduation he took up the study of the law, applying himself diligently and closely to acquiring the rudiments and some of the principles of that science. After the necessary probation devoted to study he passed a creditable examination and was admitted to the Bar. He was just getting started in practice when the Civil War, with all its horrors, opened upon the land, and his patriotism becoming feverish, he first devoted himself to obtaining recruits, and then, in September, 1862, went to the front as Assistant Adjutant-General on the staff of, General Thomas L. Kane, a man as famous in his way as his brother, the Arctic explorer, was in his, or their father was in the judiciary. As Captain and Assistant Adjutant-General, 2d Brigade, 2d Division of the 12th Army Corps, he served throughout the war. From his baptism of fire at Chancellorsville, through the perils and anxieties of transfer of the Corps from the Army of the Potomac to the Army of the Cumberland, in the campaign of Lookout Mountain,

resisting the desperate attack at Wauhatchee, accompanying Sherman on his march to the Sea, up to the final surrender of Johnston, Captain Green proved himself an able, brave and patriotic soldier of the Republic, whose honors he is entitled to wear.

After returning from the war, or on January 10, 1865, he entered the service of the Pennsylvania Railroad Company as Private Secretary to Thomas A. Scott, then First Vice President. He remained in that position until January 1, 1866, when he accepted the position of Secretary and Treasurer of the Milwaukee and Minnesota Railroad Company, and which he resigned on the 1st of January, 1868. On July 1, 1869, he returned to his former position in the Pennsylvania Railroad Company as Private Secretary to Mr. Scott, which position he held until, in 1874, Mr. Scott having been promoted to the Presidency, he was promoted by a resolution of the Board of Directors to the position of Assistant to the President. On the 1st of October, 1882, he was made Fourth Vice President; on the 1st of June, 1886, Third Vice President; on March 1, 1893, Second Vice President, and on February 10, 1897, First Vice President. Every step of Captain Green's advance in the service has been accompanied by hard work; but with a cheery disposition and a consciousness that success can only come through that channel, he has shouldered his responsibilities and marched forward with the steady tread of a true soldier. Having to rely entirely upon his own ability for the prominent place he now holds, he possesses full confidence in himself, and inspires all with whom he comes in contact with the view that he is a man to be relied upon on all occasions.

The Second Vice President has special charge of the Transportation Department and general supervision of the Purchasing, Real Estate and Insurance Departments. He exercises a special supervision over the disbursements of the transportation departments of all lines owned, operated or controlled by the Company east of Pittsburgh and Erie, and makes from time to time such recommendations in connection therewith as may, in his judgment, be to the interests of the Company. He has general supervision of all construction work upon the railroads so owned, operated or controlled by the Company, and submits to the President for his



CHARLES E. PUGH

approval the plans, estimates and contracts for all such work. He is assisted by a Chief Engineer and Chief of Motive Power; the Chief Engineer has charge of all engineering and construction work upon the roads owned, operated or controlled by the Company, and is held responsible for the proper preparation of plans, specifications and estimates connected therewith, and also for the preparation of plans and specifications for all bridges and important structures. He keeps in his office a detailed record of the cost of construction of all new work chargeable to construction account, and prepares and approves proper bills in payment therefor. He also keeps an account and has charge of the distribution of steel rails for construction and removals.

The Chief of Motive Power has general supervision of the Motive Power Department so far as may be necessary to preserve the standards and systems of the Company and insure adherence to the same. All plans for locomotives, rolling and floating equipment are submitted to him by the General Manager for approval as standard. He keeps himself informed as to the condition and capacity of the shops and other facilities for the proper maintenance of the equipment of the Company, and makes to the General Manager, for his information, such reports and suggestions in connection therewith as in his judgment may be necessary. He confers with the Purchasing Agent in reference to the purchase of tools, machinery, material and supplies for use in the Motive Power Department, and is kept generally informed by him in regard to the stock of material on hand at the various points. He keeps in his office a record of all patents owned or purchased by the Company, the originals being deposited with the Secretary, sees that the proper officers are informed concerning the rights of the Company therein, and makes such suggestions in reference thereto as may be to the interests of the Company. He has charge of the organization of the car trusts, keeps himself advised of the leases and other arrangements connected therewith, and keeps a record of the equipment furnished thereunder and of its condition. He performs such other duties in connection with the motive power and equipments of the lines west of Pittsburgh, and the facilities for the construction and maintenance of the same, as may be assigned to him by

the President, and such other duties as may be assigned him by the Second Vice President, the President or the Board.

Charles Edmund Pugh, the Second Vice President of the Pennsylvania Railroad Company, was born at Unionville, Chester County, Pa., on the 25th day of February, 1841. His father was the late Elijah Pugh, a member of the Society of Friends, a man of probity, and in business a merchant and transporter. His early education was received in the district school of his birthplace. He applied himself closely to his studies in preparation for admission to the State Normal School at Millersville, Lancaster County, Pa., which he subsequently entered. He was graduated from that institution after completing a thorough course of study, and entered his father's office, wherein he acquired the elements of that business knowledge which has been so valuable to him and his employers. On October 1, 1859, he entered the service of the Pennsylvania Railroad Company as agent at Newport, Perry County, Pa., and performed his duties with such marked ability that the attention of his superiors was attracted to him as a young man of character and merit. They therefore selected him as one to be advanced in the Transportation Department. To familiarize himself with all the details in the practice and theory attending the running of trains he entered the train service, and served as passenger conductor for a period of six months. In 1864 he was appointed Train Dispatcher of the Philadelphia Division; on August 1, 1870, General Agent for Philadelphia; on April 1, 1879, General Superintendent, Pennsylvania Railroad Division; on October 1, 1882, General Manager; on March 1, 1893, Third Vice President, and on February 10, 1897, Second Vice President.

Mr. Pugh has always proven himself fitted for every position to which he has been appointed, and equal to the responsibilities laid upon him; but at no time has he attracted more attention, displayed more ability, and deserved more credit than during the Centennial Exhibition of 1876. The handling of such vast crowds as were in attendance on the Exhibition had never before been undertaken, and how to do it was more or less problematical; but it was with no small degree of confidence in Mr. Pugh's ability to organize success that the management called him to the task. Never before



W. H. BROWN



THEODORE N. ELV

in the history of American railroads had any one been called upon to cope with such a problem ; but with full confidence in himself, a determination to do the best he could, and with an extensive knowledge of men and their capabilities, he undertook the task, feeling that the outcome must be successful. His labor during the period of the Exhibition was remarkable, but the successes achieved were looked upon by railroad men at home and abroad as marvellous. Over 3,000,000 of passengers were received at and dispatched from the stations during the continuance of the Exhibition, and so admirably had he arranged for the comfort and safety of the people that not one accident occurred.

He has demonstrated not only his great executive ability in developing the immense transportation facilities of the Company, but also his thorough familiarity with railroad work as a science. He possesses a knowledge of those unlimited details of management in the multitude of sub-departments which have from time to time been under his charge, and which has been gained only by many years of experience, during which his keen perceptions and close attention to business played no inconsequent part. Magnetic in manner and gentle in speech, he attracts men to him and binds them with unbreakable cords. These qualities have on many and some anxious occasions been of great service to the Company's interest, when his strong individuality has brought about the solution of knotty, if not serious, problems.

William H. Brown, Chief Engineer, was born in Little Britain Township, Lancaster County, Pa., on the 25th of February, 1836, and finished his education at the Central High School of Philadelphia, from which has been graduated so many men whose after lives have been so successful in the professions and varied lines of business. After he was graduated he made civil engineering his profession, and assisted in the surveys of a number of new lines of railroad, and served the City of Philadelphia with the surveyor of the Third District until the breaking out of the Civil War in the United States. He then joined Colonel Thomas A. Scott's forces engaged on the military railroads and telegraph lines for the Government. Serving in various capacities during the organization period of those forces, he gave such evidence of his business and

professional qualifications that in October, 1861, Colonel Scott selected him as Engineer of the United States Military Railroads in Northern Virginia, with headquarters at Alexandria. He performed the arduous and dangerous duties of that position with eminent efficiency and success during the stirring and trying times of the battles of Second Bull Run and Front Royal. Returning to civil life, he was, in November, 1862, assigned to assist in the completion of the Pan Handle Road, and one year later appointed its Principal Assistant Engineer. In October, 1864, he was transferred to the Pittsburgh Division, Pennsylvania Railroad, where he remained until March 17, 1865, when he was appointed Engineer of the Oil Creek Railroad. In July, 1865, he accepted the position of Principal Assistant Engineer, and in September, 1867, was appointed Engineer of the Philadelphia and Erie Railroad. In March, 1869, he was transferred to Altoona, and took charge of the construction of the maintenance of way and car repair shops. On the 10th of January, 1870, he returned to practical railroad construction, maintenance and operating, and was successively Resident Engineer of the Middle Division of the Pennsylvania Railroad, Chief Engineer of the Sunbury and Lewistown Railroad, Superintendent of the Lewistown Division, and Superintendent of the Bedford Division. On August 1, 1874, he was appointed to the position he now occupies.

Mr. Brown is one of the ablest men in his profession, and is worthy of the high esteem in which he is held for his qualities as an executive officer, for his restless energy, his rugged honesty, and the facility with which he has always met and overcome most serious obstacles that have confronted him. Some of his triumphs during the war were the building of the bridge, 430 feet long, over the Shenandoah River at Front Royal, Va., in forty-eight hours, and the construction of a military bridge over the Rappahannock River, near Culpepper, Va., in four days; whilst those of peace are almost beyond enumeration. However, his emergency work following the floods of 1889; the erection of maintenance of way shops, the car repair shops and the new Juniata shops at Altoona; the rebuilding of the Union Station, and the reconstruction of the yards at Pittsburgh after their destruction in 1877; Broad Street

Station, the first, and the Filbert Street Elevated Railroad, Philadelphia; three station houses at Jersey City, the Jersey City Elevated Railroad, train shed and station, and the new Broad Street Station, train shed and general office building; the erection of the Delaware River Bridge at Frankford, with the construction of the railroad approaches to it, both in New Jersey and Pennsylvania, with the work for the elimination of grade crossings in Jersey City, Elizabeth and Philadelphia, are all monuments of his aptitude and high attainments as an Engineer.

Notwithstanding he has constructed special works of the high order and great magnitude of the foregoing, his whole time has not been devoted to their consideration, for concurrent with their construction he kept constantly at the task of bettering and improving the roadway and bridges of the Pennsylvania Railroad. Under his directions additional tracks have been laid, iron bridges replaced by stone ones, curves ejected, grades reduced and the length of the line shortened.

A man of conspicuous talent, always busy; one habituated to labor by his extended experience, and having a powerful constitution, never undermined or weakened by any kind of excesses, he bids fair to live for many years and bask in the gratification of greater professional triumphs than those he has already enjoyed.

He now justly holds a high position among the prominent civil engineers of the world.

Theodore Newel Ely, Chief of Motive Power, whose high rank as a civil engineer is universally recognized, was born at Watertown, N. Y., on the 23d of June, 1846. After preparatory studies in the schools he entered, in 1863, the sophomore class of Rensselaer Polytechnic Institute, and was graduated at that institution as a civil Engineer in 1866. Immediately after graduation he engaged as an Engineer at the Fort Pitt foundry in Pittsburgh, experimenting under General Rodman with projectiles. In the following year he went into the Monongahela River country and operated coal mines. In 1868 he began his active railroad career as an Engineer on the Pittsburgh, Fort Wayne and Chicago Railway, under its Chief Engineer, Mr. H. A. Gardner. In the same year he was appointed Assistant Engineer of the Philadelphia and Erie Division

of the Pennsylvania Railroad. In 1869 he served as Superintendent, Middle Division, of the Philadelphia and Erie Railroad; in 1870 Assistant General Superintendent of that line; and in 1873 its Superintendent of Motive Power. Mr. Frank Thomson having, on July 1, 1874, been appointed the General Manager of the Pennsylvania Railroad, Mr. Ely was called to Altoona to succeed him as Superintendent of Motive Power. In 1882 his duties were increased and his title advanced to General Superintendent of Motive Power of the Pennsylvania Railroad system, and on the 1st of March, 1893, he was promoted to his present position, which practically makes him responsible for the entire equipment of the system.

Mr. Ely's splendid technical education, thorough training, and wide and varied experience, combined with his energy, perfect manners and self-control, has placed him at the head of his profession. The railroads of the country and their patrons are largely indebted to him for the high standard that railroad equipment has reached. The economical improvements in weight and power of locomotives, and the carrying capacity of freight cars, introduced by him, have revolutionized the old methods of handling traffic and made possible the low rates of charges for carrying which prevail. Mr. Ely established at Altoona, in 1873, a department of chemical and physical tests, which, since its establishment, has conducted many original investigations in all branches of railroad operations, from which numerous specifications have issued which have proven of great value to all railroads and to manufacturers of railroad supplies. Those wonderful Pennsylvania Railroad exhibits, which were a perfect epitome of American railway history and attracted the world's attention at the Centennial Exhibition in 1876, the Paris Exhibition of 1889, and the Columbian Fair at Chicago in 1893, originated with and were planned by Mr. Ely, and all the details of the work necessary to make them a success were carried out under his supervision.

President Harrison paid him a deserved honor when he selected him to act as one of a committee to examine and report upon the condition of the massive steel vaults of the United States Treasury at Washington, D. C. He is a Director of the American Society



S. M. PREVOST

Civil Engineers, a member of the Institution of Civil Engineers of England, the American Institute of Mechanical Engineers, the Franklin Institute, and an honorary member of the American Institute of Architects. He is Vice President of the Eastern Railroad Association, and a member of the Safety Appliance Committee of the American Railway Association. He is a clear, cogent and facile writer on scientific subjects, and contributes many valuable papers upon them to the societies, magazines and technical periodicals. Amidst the multiplicity of his duties and studies he finds time for art, as expressed in paintings, architecture and carving, of which he is a devoted lover and admirable judge. His excellent taste in this line is reflected in the refined designs and decorations of the Pennsylvania Railroad equipment.

The Third Vice President is charged with the procurement and development of traffic for and upon the Company's lines. He has special supervision of the Freight and Passenger Departments, and all the operations of those Departments are subject to his approval or that of the President. He has also special charge of those relations with competing companies and connecting lines that may be associated with the performance of his duties. He assists the President in other matters relating to the railroads owned, operated or controlled by the Company.

Sutherland Mallet Prevost, Third Vice President of the Pennsylvania Railroad Company, was born in Philadelphia on Sunday, October 5, 1845. He is of an old Huguenot family, whose records go back for over 700 years. Upon the revocation of the Edict of Nantes they took up their residence in Switzerland. His great-grandfather, Paul Henri Mallet Prevost, a banker of Geneva, was a nephew of General Augustine Prevost, distinguished for his defense of Savannah during the Revolutionary War, and a cousin of Sir George Prevost, a son of Augustine's, Commander of the British forces in Canada and Governor General of Nova Scotia. Upon the breaking out of the French Revolution Paul Henri retired from business and joined the French Army as Commissary General with the Dumoriez Corps de Armee. In 1794 he came to this country and settled at Alexandria, Hunterdon County, New Jersey. As several of his family and a number of his army comrades followed

him, the place became known as Frenchtown, which name it bears to-day.

Mr. Prevost's grandfather, Andrew M. Prevost, and his father, Charles M. Prevost, were both well-known citizens of Philadelphia, the former as a Colonel in the War of 1812, and the latter as Colonel in the War of the Rebellion, and brevetted Brigadier General for gallantry in action.

Mr. Prevost was graduated from the Polytechnic College of Philadelphia, which is the Alma Mater of so many prominent and successful railroad men. His technical education being completed, he entered the railroad service as a Rodman in the Engineer Corps engaged in constructing the Philadelphia and Erie Railroad, and his subsequent services and promotions have been as follows :

In 1864 and 1865, Rodman, Elmira Division, Northern Central Railway ; 1865, Assistant Engineer, Western Pennsylvania Railroad ; 1866, Assistant Engineer on the Susquehanna Division Surveys of the Atlantic and Great Western Railroad ; 1867, Assistant Engineer, Baltimore and Potomac Railroad ; 1868, Assistant Engineer, Wilmington and Reading Railroad ; 1868 and 1869, Principal Assistant Engineer of Construction in the preliminary surveys from Newark, N. J., to Tamaqua, Pa., of the New Jersey West Line Railroad. The success which attended his labors in those undertakings won him a position in the service of the Pennsylvania Railroad Company, which he entered January 1, 1871, as Assistant Engineer, Maintenance of Way, on the Philadelphia Division, and continued in that position until August, 1874, when he was promoted to be Superintendent of the Bedford Division. October 15, 1878, he was appointed Superintendent, Middle Division, Pennsylvania Railroad ; July 1, 1881, Superintendent, Philadelphia Division ; October 1, 1882, General Superintendent, Pennsylvania Railroad Division. His record in this important office showed that he possessed a high order of administrative ability, and brought about his promotion on May 1, 1885, as General Superintendent of Transportation of the Pennsylvania Railroad System east of Pittsburgh and Erie, and on March 1, 1893, he was advanced to General Manager, and on February 10, 1897, to Third Vice President.

His identification with the construction and development of many of the roads and lines over which he has now jurisdiction gave him an excellent training. That, and his extensive knowledge of practical railway work and his familiarity with the entire Pennsylvania system, admirably fits him for the discharge of his arduous and responsible duties. His great capacity for work found a high expression at the time of the Johnstown flood in 1889. A writer of that period, speaking of the calamity and the part taken by railroad officials to repair the damage, says: "It fell to Mr. Prevost's lot to remain at the helm in Philadelphia in charge of the movement of men, materials and supplies to the scene of active operations in the flooded districts. This involved the exercise of the utmost promptness, ceaseless labor, and rare executive ability, but it is a matter of history that the stupendous work of rehabilitating the line was accomplished in the face of the greatest obstructions in an incredibly short space of time. Every official of the Company won conspicuous merit in this crisis, and a fair share of it is justly accorded to him who sat day and night with his hand practically on the telegraph key, guiding the movements of relief trains and re-establishing the service as fast as the gaps in the broken lines were closed."

He has a calm temperament that never ruffles; is a man of unquestioned ability and most excellent judgment, cool in action, prompt, untiring, energetic and industrious—combined qualities which make him an officer of unusual efficiency. Added to those qualities, his high manly character, sterling honesty and fair dealings, together with a charitable inclination of mind and kindly expression in speech, have made him very popular with employees of all grades and the public of all classes.

The First Assistant to the President specially assists the President in engineering questions pertaining to any of the lines of railroad or property owned, controlled or operated by the Company. He has the general charge of the promoting of new lines of railroad in which the Company may be interested, and of the corporate work in connection therewith, the plans, estimates and contracts for all such work to be submitted to the President for approval.

He assists the First Vice President in matters connected with the

railroads controlled directly or indirectly by the Company west of Pittsburgh.

He also assists the President in other matters connected with the lines owned, operated or controlled by the Company, and performs such other duties as may be assigned to him by the President or the Board. He is aided by an Engineer of branch lines, especially in matters connected with construction work under his charge.

The Assistants to the President perform such duties as the President may from time to time assign them.

Mr. Samuel Rea, the First Assistant, was born in Hollidaysburg, Blair County, Pa., September 21, 1855. His mother is a daughter of Thomas B. Moore, of that county, and his father, James D. Rea, who died in 1868, was a well-known resident of Hollidaysburg. His grandfather, John Rea, of Chambersburg, Franklin County, Pa., was an officer in the War of the Revolution, and also in the War of 1812, and was a member of Congress from 1803 to 1811, and from 1813 to 1815. His great-grandfather, Samuel Rea, emigrated to this country from the north of Ireland, 1754-1755, first stopping in Chester County, later in Lancaster County, and finally settled in Franklin County (then Cumberland County).

Mr. Rea had but little schooling. Shortly after the death of his father he clerked in a store for a time, but was practically brought up on the Pennsylvania Railroad. His first engineering work was in 1871, on the Morrison's Cove, Williamsburg and Bloomfield Branches. The panic of 1873 stopping all engineering work, he entered the office of the Hollidaysburg Iron and Nail Company early in 1874 in a clerical capacity. In the spring of 1875 he was attached to an engineering corps of the Pennsylvania Railroad stationed at Connellsville. From 1875 to 1877 he was Assistant Engineer in the construction of the Chain Suspension Bridge over the Monongahela River in Pittsburgh. When the bridge was finished he was appointed Assistant Engineer of the Pittsburgh and Lake Erie Railroad, then building, where he remained until that road was completed. In 1879 he was Assistant Engineer in charge of the construction of the extension of the Pittsburgh, Virginia and Charleston Railway, a leased line of the Pennsylvania Railroad, of which he is now President, and from 1880 to 1883 Engineer in



SAMUEL REA



JOSEPH U. CRAWFORD



W. A. PATTON



E. T. POSTLETHWAITE

charge of surveys in Westmoreland County, and the revision and rebuilding of the Western Pennsylvania Railroad under the direction of Vice President Du Barry. In 1883 Vice President Du Barry called him to Philadelphia as Principal Assistant Engineer, which position he held until 1888. He was then made Assistant to the Second Vice President, which position he retained until 1889. He then resigned to go to Baltimore as the Vice President of the Maryland Central Railway and Chief Engineer of the Baltimore Belt Railroad, the latter a comprehensive surface and underground line through that city, which he located and put under construction for the Baltimore and Ohio Railroad Company. In 1891, on account of ill health, he resigned and left Baltimore, doing no active work for a year. After an absence of three years from the Pennsylvania Railroad, he was chosen on May 25, 1892, Assistant to the President, a position which had remained unfilled since the death of Strickland Kneass. On the day of his appointment he left for London, where he made an examination of the new underground electric railways—then constructed and proposed—and subsequently made a special report thereon. In the reorganization of February 10, 1897, he was appointed First Assistant to the President. He is aided by an Engineer of Branch Lines.

Mr. Rea is a member of the American Society of Civil Engineers and of the Institution of Civil Engineers of London, England. He is the author of "The Railways Terminating in London," a work evidencing comprehensive study and laborious personal investigation of the physical and financial condition of the English railway systems. While taking no active part in its direction, he was for some years a member of the firm of Rea Bros. & Co., bankers and brokers, of Pittsburgh, and is yet a member of the New York Stock Exchange.

Mr. Rea has for many years been interested in the project to bridge the Hudson River from Hoboken to New York City, and thus establish in the metropolis a terminus for the railroads which now reach it by ferriage from the New Jersey side. He was one of the incorporators named in the Act of Congress authorizing the formation of the North River Bridge Company, has been active in the work of that Company, and continues as a Director.

Joseph Ury Crawford, Engineer of Branch Lines, was born at Ury farm, Philadelphia, August 25, 1842. Educated at John W. Faires' school, from which he went to the University of Pennsylvania in the class of 1862.

Enlisted and went out with the Washington Grays, of Philadelphia, in April, 1861; appointed Second Lieutenant of Company B, 6th New Jersey, September, 1861; made First Lieutenant of same Company at the battle of Williamsburg, May 5, 1862. Made Captain Company A, 6th New Jersey, at the battle of Seven Pines, June, 1862; engineer officer, field fortifications, General Hooker's staff, at Fair Oaks, upon the Peninsula, in 1862; served with his company as Captain through the Pope and Gettysburg campaigns; Engineer officer on Major-General Gershom Mott's staff through the Wilderness, Spottsylvania and Petersburg campaigns; was honorably mentioned in United States Army Reports for good conduct at Seven Pines, 1862, and Morton's Ford, in 1863.

He followed engineering since the war, and was first identified with the Pennsylvania Railroad Company as Senior Assistant Engineer of the Alexandria and Fredericksburg Railroad during 1871 and 1872. Principal Assistant Engineer, and afterwards Engineer, of the California Division of the Texas and Pacific Railroad under Colonel Thomas A. Scott, and sent by him as Consulting Engineer of the Government of Japan in 1878, at the close of which engagement he was decorated by the Emperor of Japan with the order of the Rising Sun.

After his return to America he was employed by the late Jay Gould to make transcontinental examinations and surveys between the Pacific Coast and Salt Lake City, as well as in Wyoming and Nebraska Territories.

In the fall of 1882 he again entered the service of the Pennsylvania Railroad Company as Chief Engineer of the Pennsylvania Schuylkill Valley Railroad; built the Piedmont and Cumberland Railroad in 1886 and 1887; appointed Assistant to Second Vice President of the Pennsylvania Railroad Company in August, 1889, and, upon the death of Mr. J. N. Du Barry, Second Vice President, was appointed Engineer of Branch Lines.

William A. Patton, Assistant to the President, was born at Union

Furnace, Huntingdon County, Pa., on October 21, 1849. His father, George W. Patton, was prominently identified with the iron furnaces in the Juniata Valley, and at the above date was manager of Union Furnace. He subsequently removed to Altoona, becoming one of the early settlers and prominent business men of that now prosperous railroad city, and serving as its Postmaster and as Associate Judge of Blair County.

Mr. Patton received his education in the Altoona public schools, finishing with a course in the High School. He entered the service of the Pennsylvania Railroad Company as a boy in the General Superintendent's office on January 11, 1865; was soon promoted to a clerkship, and remained in the office until it was merged with that of the General Manager, and removed to Philadelphia in December, 1871, at the time the Pennsylvania Railroad secured control of the New Jersey system. He was appointed Chief Clerk in the office of Mr. A. J. Cassatt, General Manager, on the 1st of August, 1872, and remained with Mr. Cassatt in the capacity of Chief Clerk as long as that gentleman occupied the offices of General Manager, Third Vice President and First Vice President. Upon the retirement of Mr. Cassatt from the Vice Presidency, on the 1st of October, 1882, Mr. Patton was transferred to the President's Department, and on April 1, 1884, appointed by the Board of Directors as General Assistant, which position he has since filled. In addition to his duties in connection with the President's Department, he also performs such special duties as may from time to time be assigned to him by the President or Vice Presidents.

Mr. Patton was, on May 24, 1884, elected Vice President of the New York, Philadelphia and Norfolk Railroad, which line forms the southern connection of the Pennsylvania Railroad from the terminus of the Philadelphia, Wilmington and Baltimore Railroad system, at Delmar, to Cape Charles and Norfolk, which position he fills in connection with his duties with the Pennsylvania Railroad Company.

Edward T. Postlethwaite, who was, on February 10, 1897, appointed Assistant to the President of the Pennsylvania Railroad Company, was born near Newton Hamilton, Mifflin County, Pa., on July 4, 1850. He entered the service of the Canal Department of the Pennsylvania Railroad Company on April 18, 1863, as

Timekeeper, and was subsequently clerk in the office of Thos. T. Wierman, Chief Engineer, and afterwards Assistant Collector at Columbia and Lock Haven, and in 1872 commenced his railroad work as Shop Clerk at the Northern Central Railway shops, in York, Pa. In August, 1873, he was transferred to the office of Mr. Frank Thomson, then Superintendent of Motive Power at Altoona. When Mr. Thomson was appointed General Manager of the Pennsylvania Railroad lines east of Pittsburg and Erie, on July 1, 1874, Mr. Postlethwaite came with him to Philadelphia, and served successively under his administration as Chief Clerk in the office of General Manager, Second Vice President and First Vice President.

THE SECRETARY.

The very name of Secretary is suggestive of the confidential character of the office. It is one in which the occupant, whilst conducting the correspondence, keeping the records of the doings of the Board and meeting the general public, must be a man of education and polish, bland and affable, tactful and shrewd, but always preserving a proper reserve. His duties cover a wide range of subjects connected with both the administrative and executive functions of the Company, which renders the position one of great responsibility.

John Clarke Sims, the Secretary of the Pennsylvania Railroad Company, whose ancestors for three generations back were identified either with the military, scientific, religious or commercial history of Pennsylvania and of the City of Philadelphia, was born in that city on the 12th day of September, 1845. His parents were John Clarke and Emeline Marion Sims. He received the rudiments of his education at the hands of tutors, or in private schools, after which he entered the University of Pennsylvania, and was graduated from the Department of Arts in June, 1865. Upon leaving the University he registered as a law student with Hon. Peter McCall. In October, 1868, after a three years' course of study, he passed a creditable examination and was admitted to practice at the Bar of Philadelphia. Shortly after his admission he went abroad, devoting two years to travel and observation. On January 1, 1876, he entered the service of the Pennsylvania Railroad Company as Assistant Secretary, which position he held until



J. C. SIMS



LEWIS NEILSON



STEPHEN W. WHITE



JAMES R. McCLURE

March 23, 1881, when he was promoted to the Secretaryship, upon the resignation of Mr. Joseph Lesley. His position places him in the closest confidential relations with the officers and Board of Directors in all their deliberations, and his responsibilities, by reason of that fact, are of the gravest character. He is a man of great qualifications, of rare discrimination and excellent memory; an indefatigable worker, of pleasing manners—in every way, by study and habits of life, character and attainments—eminently fitted for his position. The duties of his office, exacting though they are, have not occupied his exclusive time, for he has found the spare hours to devote to other interests, and it is not surprising that he fills a number of positions of responsibility and trust that demand executive talents of a high order. He is Accounting Warden of St. Paul's Episcopal Church, at Chestnut Hill, where he lives; a Lay Deputy to the Diocesan Convention of Pennsylvania, President of the Chestnut Hill Academy, Trustee of the University of Pennsylvania, member of the Board of Managers of the University Hospital, the University Veterinary Hospital, and the Girard Life Insurance, Annuity and Trust Company. Business, arts, science and the promotion of charitable institutions have not consumed all the hours free from rest and social duties, for the athletic sports have found in him a warm friend and generous advocate. He was a member of the International Cricket Committee that had charge of some of the most important matches ever played in America against foreigners, as well as of the Committee which sent to England the Philadelphia teams in 1884 and 1889. The Pennsylvania Railroad Athletic Association, which is now merged into the Pennsylvania Railroad Department, Young Men's Christian Association, owed much to his energy and love of sport. He was first President of the organization and was largely instrumental in securing for its use the grounds at Fifty-second street, which now form quite an attractive feature of the latter Association. He is a member of the Society of the Cincinnati in the State of New Jersey, and of the Pennsylvania Society Sons of the Revolution.

Gentle, obliging and courteous to all, he makes friends everywhere, but nowhere is he more popular than among the officers and employees of the Pennsylvania Railroad Company.

Lewis Neilson, Assistant Secretary, was born at Florence, N. J., in September, 1860, and prepared for the University of Pennsylvania at the Episcopal Academy in Philadelphia. He entered the University in June, 1877, and was graduated from the college department in June, 1881. On the 20th of June, 1881, he entered the service of the Pennsylvania Railroad Company as weighing clerk on Walnut Street Wharf. From the 1st of October to the 10th of December, 1881, was assistant receiving clerk at that station. From the latter date until the 23d of October, 1882, he filled various positions in the cashier's department of the Agency. On October 23, 1882, he was promoted to be stenographer in Mr. Walton's Trace Claim Department, and served as such until July 16, 1883, when he entered Captain John P. Green's office as stenographer. December 1, 1885, was promoted to chief clerk in that office, and continued to occupy the position under Captain Green's several promotions to the First Vice Presidency. During his long service in Captain Green's office he also performed work in the President's office, and always acted in place of the latter's secretary when the incumbent was absent.

On May 1, 1897, Mr. Neilson was appointed Chief Clerk to the Secretary on the promotion of Robert H. Groff to be Registrar of Stock. On the 26th of the same month he was appointed Acting Assistant Secretary on account of the illness of Mr. Newhall, and since that time has continued to fill that office in addition to performing his duties as Chief Clerk. Mr. Neilson has for many years been prominent in the Graduate Councils of the University of Pennsylvania, and is a member of the Board of Directors and Executive Committee of the General Alumni Society, as well as its Secretary and Treasurer.

Stephen W. White, Secretary, was born in the City of Philadelphia on July 16, 1840, and educated in the public schools of that city. In February, 1854, he was advanced from the Jefferson Grammar School to the Central High School, from which, after a four years' course, he was graduated, February, 1858, as Bachelor of Arts, at the head of his class. Among his classmates were a number who have since attained prominence in business and professional pursuits. A few years subsequent to his

graduation he received from the High School the degree of Master of Arts.

From July 1, 1858, until February 1, 1870, he was variously employed as confidential shorthand clerk to the Treasurer of the American Sunday-school Union and assistant to the editor of the "Sunday-school Times," as assistant bookkeeper in a large importing dry goods house, and as the bookkeeper of a wholesale grocery house. These literary and business pursuits fitted him for his next position, that of private secretary to the great banker, Jay Cooke. He entered his service on February 1, 1870, and remained with him until some time after the failure of the banking firm of Jay Cooke & Co., which event occurred on the 18th of September, 1873. On the 1st of January, 1875, he entered the railroad service as Assistant Secretary of the Northern Central Railway, and on September 26, 1877, was elected as Secretary of that Company, succeeding the first Secretary, Mr. Robert S. Hollins.

He was elected Secretary of the Shamokin Valley and Pottsville Railroad Company, taking effect September 1, 1880. March 9, 1881, he was elected clerk of the Girard Point Storage Company; February 1, 1881, Assistant Secretary of the Pennsylvania Company and of the Pittsburgh, Cincinnati and St. Louis Railway Company; and September 23, 1885, Assistant Secretary of the Chicago, St. Louis and Pittsburgh Railroad Company. On the consolidation of the last two named Companies into the Pittsburgh, Cincinnati, Chicago and St. Louis Railway Company he was, on September 18, 1890, elected the Assistant Secretary of the latter Company.

July 1, 1884, he was elected Secretary of the Sodus Bay and Southern Railroad Company. On its consolidation with the Chemung Railroad and the Elmira, Jefferson and Canandaigua Railroad Companies, December 31, 1886, forming the Elmira and Lake Ontario Railroad Company, he was elected Secretary of the consolidated Company. On February 5, 1892, he was elected Secretary of the Allegheny Valley Railway Company, which is the title of the reorganized Allegheny Valley Railroad Company. Where it is not specifically stated, Mr. White still holds the above-mentioned positions.

Mr. White is an active member of the Associated Alumni of the High School and a member of its Board of Managers. For some time he served as a School Director in the Thirteenth Ward, and gave his best thought to advancing the educational standard. He is an active churchman, and is prominently identified with the work in the Episcopal Church in the Diocese of Pennsylvania. He is a man of broad intellectual tastes, favoring the study of languages, and has published some excellent translations from the German and French. His writings are all clean and terse, displaying careful study and methodical arrangement, resultants of his early training in stenography, in which science he is not only an expert but an accomplished devotee. While his mind tends largely to the critical, his criticisms may always be considered as fair and just.

James Russell McClure, Secretary, son of David McClure, Professor of Mathematics, United States Navy, was born Wednesday, April 11, 1827, in the City of Philadelphia. To Professor David McClure is due the honor of suggesting and shaping the Naval School, which was founded on his urging upon the Government a plan for the scientific improvement of the navy. His plan was so comprehensive that he was ordered by Secretary of the Navy Paulding, on June 5, 1839, to pass through the formality of an examination at the New York Navy Yard, preparatory to an appointment in the navy. On the 17th of the same month he received his commission as Professor of Mathematics, United States Navy, and on the 18th of November, 1839, he reported to Commodore James Biddle for duty at the Naval School about to be established at the Naval Asylum at Philadelphia. It was then and there that school of instruction was established which has made the United States Naval Officers inferior to none, superior to many, and equal to any in the world for prowess, scientific attainments, manly bearing and their knowledge of diplomacy; and this result was largely due to the foundation for their training which was laid by the learned Professor McClure, who first sat in the school's Chair of Mathematics. He died in April, 1842, in the prime of life and usefulness.

James Russell McClure, in seeking a channel for future usefulness, naturally sought it along mathematical lines, and, in consequence,

we find him taking up his work in connection with railroad construction. He entered the service of the Pennsylvania Railroad Company July 1, 1847, and from then to November 1, 1848, was chainman and rodman on preliminary surveys and location between Mt. Union (on the Juniata) and Gallitzin (west end of Allegheny Mountain tunnel); November, 1848, to June, 1850, rodman on construction between Barre and Tyrone, Little Juniata Division; June, 1850, to June, 1853, Assistant Engineer for erection of Altoona shops, and for construction of part of eastern slope of the Allegheny Mountains; June, 1853, to September, 1855, Senior Assistant Engineer, North Pennsylvania Railroad, location and construction from Philadelphia (Front and Willow streets) to Camp Hill (Sandy Run); November, 1855, to February, 1856, Superintendent Huntingdon and Broad Top Railroad; July 1, 1856, to October, 1858, Principal Assistant Engineer Pacific Railroad, construction west of Jefferson City, Missouri; October, 1858, to June, 1861, Principal Assistant Engineer Southwest Branch of the Pacific Railroad, construction through Crawford, Phelps and Pulaski Counties; August, 1861, to February 1, 1874, Principal Assistant Engineer Department of Surveys, City of Philadelphia; February 1, 1874, re-entered the service of the Pennsylvania Railroad Company as one of the Secretaries and Treasurers of various companies controlled or leased by it, including the West Jersey and Seashore Railroad Companies.

THE TREASURY.

Indicative of the strength and high standing of the Pennsylvania Railroad Company is its Treasury Department. From the first meeting of the Board in 1847, when George V. Bacon took his seat as Treasurer, until the present time, the Directorate has given the Treasury its most careful and jealous oversight, and conducted its affairs in a conservative manner and one conducive of safety. Resulting from this wise policy of the management has grown one of the largest financial institutions in the world, with perfect machinery, and maintained with great fidelity by the officials in direct charge of the administration of its affairs. The extent of the business interests of this gigantic institution is shown in the following facts:

The Department has in its vaults and is responsible for the safe keeping of securities whose par value exceeds two hundred millions of dollars. It carries an average cash balance of more than five million dollars, and its receipts surpass two hundred millions of dollars per annum. The disbursements frequently go beyond one million dollars a day. It keeps accounts in sixty-three banks and pays semi-annual dividends to twenty-eight thousand shareholders of the Pennsylvania Railroad Company, and the interest of its bonded indebtedness, besides dividends and interest on stock and bonds controlled by the Company. The organization of the Department is under the supervision of the First Vice President, and consists of a Treasurer, an Assistant Treasurer and a Cashier.

The Treasurer is the custodian of all the money and securities of the Company ; keeps the First Vice President, the President and the Board fully advised on all matters connected with such custody, and must see that the financial needs of the Company are provided for in due season. He keeps a set of books which contain the accounts of the Company, showing the disposition of all its funds passing through his hands. Such funds are kept by him in the name of the Company in such banks or places of deposit as the Board designates from time to time. Early in February of each year he makes out and furnishes to the President a complete statement of his accounts for the preceding year. He is subject to call at any time, from the First Vice President, President, Finance Committee or Board, for similar statements.

Each day he furnishes the Comptroller a statement of all his receipts and disbursements, together with vouchers to verify the same, so that official may have proper entries made in a general set of books kept in his office and be able to certify to the correctness of the Treasurer's accounts. The trial balance, taken from the general ledger in each office, is compared at the end of each month, and the Treasurer and Comptroller are required to see that the balance of the cash on hand and in the depositories of the Company agrees with the cash balance as per the books.

At each stated meeting of the Finance Committee he reports for the information of the President and the Board his receipts and disbursements since his last report, and also his balance.



He is required to attend to such other duties connected with the finances of the Company as may be given him by the First Vice President, the President or the Board.

His books and monthly trial balance he must keep open at all times for the inspection of the Comptroller, Assistant Comptroller, Vice Presidents, President, Finance Committee or any member of the Board.

Robert W. Smith, the Treasurer, was born in New York City, April 11, 1836. His early education was obtained in that city, at the Washington Institute, of which Dr. H. K. Porter was the Principal. Mr. Smith's father dying in 1845 the family removed to Philadelphia, where his education was continued at the Rev. Mr. Faires' Classical Academy and at the Protestant Episcopal Academy, Rev. G. Emlen Hare, Principal.

In January, 1851, he entered the railway service as office boy in Leech & Co.'s Rail and Canal Transportation Company's office in Philadelphia, where he remained until 1865, when, on the establishment of the Empire Transportation Company he was appointed its Eastern Superintendent, with residence at Williamsport. In 1871 he resigned to accept the Treasurership of the Western and Atlantic Railroad Company, with residence at Atlanta, Ga., but the same year, being elected Secretary and Treasurer of the American Steamship Company, he returned to Philadelphia and accepted those positions. He still holds them, though since the completion of the Company's active operations his duties therein have been merely nominal. In April, 1885, he entered the service of the Norfolk and Western Railroad Company as its Treasurer, from which position he resigned to accept the Treasurership of the Pennsylvania Railroad Company on January 2, 1887. He is also Treasurer of the Philadelphia, Wilmington and Baltimore Railroad Company, the Baltimore and Potomac Railroad Company, the Junction Railroad Company, the West Jersey and Seashore Railroad Company, and of the thirteen subsidiary companies operated by the railroad companies named.

P. Frank Hunter was born at Gulf Mills, Lower Merion Township, Montgomery County, Pa., August 27, 1855. He was educated in the public schools at Bridgeport and Norristown, Pa., and

also at Tremont Seminary, Norristown. In 1870, shortly before reaching the age of fifteen years, he entered into business as a clerk with a Norristown merchant, with whom he remained for two years. He then took a course of instruction at Bryant and Stratton's Business College, Philadelphia, and in December, 1872, became a bookkeeper in a wholesale house on Market street, Philadelphia, which position he relinquished in 1874, and on July 1 of that year entered the service of the Pennsylvania Railroad Company as a clerk in the ticket assorting room of the Auditor of Passenger Receipts Department. He remained in that Department nine years, during which time he took an active part in the establishment of the Ticket Receiver system on the lines of the Company, and in the instruction and examination of passenger train conductors; he was also, for a short time, one of the Traveling Examiners of Station Agents' Accounts.

On July 1, 1883, he was promoted to the position of Chief Bookkeeper in the Comptroller's office, having charge of the general books of the Company and of the preparation of statistical information.

April 1, 1893, he was transferred from the Accounting Department to the Treasury Department, having been appointed by the Board of Directors as Assistant to the Treasurer.

On January 1, 1895, he was appointed by the Board of Directors Assistant Treasurer. He also holds the same position for the Philadelphia, Wilmington and Baltimore Railroad Company and the West Jersey and Seashore Railroad Company.

Benjamin F. Crawford holds the important and responsible position of Cashier of the Treasury Department, and performs the very exacting duties of that office with signal and exceptional ability. Under the direction of the Treasurer, he pays vouchers, checks and other obligations when properly certified, countersigns all checks, and performs such other duties as may be assigned to him by the Treasurer, First Vice President or the Board.

He was born March 6, 1833, at Philadelphia, in the common schools of which city he received his education, graduating from the High School in July, 1849.

For several years after leaving school he was employed in mercantile business. In 1859 he entered the banking business, filling

the various positions up to Paying Teller. On August 1, 1874, he resigned that position at the Western National Bank to accept his present position with the Pennsylvania Railroad Company. A trained banker and a man of splendid character, no one stands higher in railroad, financial and domestic circles than he as an able, faithful and incorruptible official.

THE ACCOUNTING DEPARTMENT.

Whilst a railroad corporation, as a semi-official medium in its relation to the Commonwealth, carries its freight and passengers, United States mails and express goods to aid in developing the country through which it passes, it must also make such a charge for its service as will produce sufficient revenue to pay current expenses, interest on the bond and dividends on the stock capital, provide means for improvements, advancements and betterments, and to create a sinking fund for the ultimate liquidation of its bonded indebtedness. With the close competition which now exists in the business of transportation, and the never-ceasing, ever-growing popular demand for increased facilities and quicker time at a decreased cost, the difficulties in obtaining such revenue increase in magnitude. For this reason exact accounting for both receipts and expenditures becomes an absolute necessity, and with that necessity comes the demand for the highest order of ability to fill the position of accounting officers. They must be watchful, unbending, exact, quick of comprehension and free from caprice, jealousies and personal influences. They must keep their eyes on every dollar due the Company until it reaches the treasury, and when there, keep their fingers upon it until the proper authority for its disbursement has been promulgated. The duty to be performed by the accounting officers of any railroad company of to-day is of no mean proportion, but when that duty is to be performed for a corporation of the size and scope of the Pennsylvania Railroad Company, which, as a money-gatherer and distributor, is second on this continent to the United States Government only, the proportions become colossal.

The Accounting Department of the Pennsylvania Railroad Company, as at present constituted, is in charge of the Comptroller,

aided by an Assistant Comptroller, Auditor of Freight Receipts, Auditor of Coal Freight Receipts, Auditor of Passenger Receipts, Auditor of Disbursements, Auditor of Union Line, Auditor of Empire Line, and Auditor of Canal and Coal Companies.

The Comptroller, aided by the Assistant Comptroller, has charge of all books and accounts of the Company relating to its receipts and disbursements, and maintains and enforces the system for keeping the same. It is also his duty to know that all bonds required of officers and agents for the faithful performance of their duties are executed and on file in his office, and he is also required to make a daily audit of the Treasurer's receipts and disbursements, as well as the examination, whenever necessary, of the accounts of agents and officers. The details of the earnings and expenses, which form the basis of the annual report of the Company, are also kept in his office. Regular audits of the Real Estate Department's accounts and of the Saving Fund are made, as also an audit of the accounts of the various treasurers of branch roads. All Auditors of the Company report to and receive their instructions from the Comptroller, and submit to him all matters of importance affecting their respective departments.

Robert W. Downing, Comptroller, was born in Philadelphia on January 22, 1835, and was educated in the public schools of his native city. He entered the service of the Adams Express Company, serving that Company acceptably as Auditor and Cashier, from which position he resigned to enter the service of the Pennsylvania Railroad Company as Assistant Comptroller February 1, 1872, and was promoted on May 1, 1874, to the position of Comptroller. Mr. Downing's aptness with figures and accounts have made the reputation for him as one of the most expert accountants in the service of any railroad company. He has also achieved prominence in political circles, having served his city as a member of Select Council, and as President of that branch of the city government for a number of years. He bears the proud reputation of being the officer directing the management of the Accounting Department of the most successful system of lines in the world.

The Assistant Comptroller and Auditor of Passenger Receipts, M. Riebenack, was born October 12, 1844, and on October 19,



R. W. DOWNING



MAX RIEBENACK



A. J. GILLINGHAM



JEFFERSON JUSTICE

1863, he entered the service of the Company as a clerk in the Military Transportation Office at Altoona, Pa., under the late Henry W. Gwinner. In 1864 the office was moved to Philadelphia. After the war was closed and accounts settled he was Corresponding Clerk and Cashier to the General Passenger Agent. In 1869 he was made Chief Clerk, Foreign Tickets, and in April, 1872, was appointed Assistant Auditor of Passenger Receipts, and on the retirement of Mr. Gwinner was promoted to the position of Auditor of Passenger Receipts. On October 12, 1881, he was appointed Assistant Comptroller, also retaining his former position. The Relief and Saving Fund Departments owe their success very largely to the instrumentality of Mr. Riebenack, as, in addition to his varied and perplexing duties as an accounting officer, he developed and brought into full execution the plans whereby both these departments have been of so much practical aid to the employees of the Pennsylvania Railroad Company and its allied lines. He is a member of the Advisory Committee of the Relief Department, by appointment of the Board of Directors; Chairman of Supervisory Committee, and also Chairman of Committee on Superannuation and Pension. The duties in connection with this latter committee are such as to have caused him to look into most of the railroad and other pension schemes in operation in all parts of the world. The Association of American Railway Accounting Officers, of which he was the honored President during the years 1889-90 and 1890-91, is indebted to him for its present standing, as in the formation of this Association he gave much time and attention to the development of the same, and bringing together the accounting officers of the various railroads of the country. One of the objects of the Association is to secure uniformity in railroad accounts, and Mr. Riebenack has been appointed chairman of a committee of three to confer with the statistician of the Interstate Commerce Commission with a view to placing all detailed accounts of railroad companies on the same basis. He was appointed by the President of the Pennsylvania Railroad Company, Mr. Roberts, as a member of the Building Committee in connection with the General Office at Broad Street Station, the duties of this committee being to locate and furnish the rooms in that magnificent building to accommodate the general

officers and their clerks. How well this has been carried out only requires a visit through that building. He is courteous in his manner and cool and deliberate in his undertakings, a practical accountant and respected by all who come in contact with him. He finds time from the busy cares of life to delve into literature, and is well versed on current events of the day, besides being the author of several pamphlets on practical railroad subjects.

The Auditor of Freight Receipts, Jefferson Justice, is in charge of all accounts relating to earnings from merchandise traffic, and was born in Newcastle, Pa., on February 14, 1840. He entered the service of the company as a clerk April 1, 1870; was appointed Special Agent of the Accounting Department February 1, 1872, and Assistant Auditor of Freight Receipts June 1, 1874. On May 1, 1890, he was appointed Auditor of Coal Freight Receipts, when the freight accounts were divided into merchandise and coal and coke, and on September 1, 1893, he was made Auditor of Freight Receipts, succeeding George M. Taylor, deceased. Mr. Justice's long service in the audit of freight accounts has made him thoroughly familiar with that branch of the business and he conducts the department in his charge with the greatest efficiency.

The Assistant Auditor of Passenger Receipts, Albert Jenks Gillingham, was born in Philadelphia August 23, 1847. He entered business life with Messrs. Peter Wright & Sons in June, 1865, where he remained until January 4, 1869, when he left to accept service with the Pennsylvania Railroad Company under Henry W. Gwinner, then General Passenger and Ticket Agent, and served in a subordinate capacity until the organization of the Auditor of Passenger Receipts office in April, 1872, when he was transferred to the traveling position of Special Agent, which gave him another phase of duties of a more varied character. After three years spent in this position he was made Chief Clerk of the office, from which position he was promoted on April 1, 1880, to the duties of Assistant Auditor of Passenger Receipts, which field of duty and responsibility he has filled with satisfaction.

The Auditor of Disbursements, Joseph D. Greene, is in charge of all disbursements of the Company except for interest on bonded obligations and other fixed charges and dividends, and was born at



Greene's Mills, Hocking County, Ohio, on the 7th of December, 1843. He entered the service of the Company as clerk in the Disbursement Department August 21, 1865. On June 1, 1873, he was transferred to the Comptroller's office, acting as clerk and Chief Clerk until January 1, 1875, when he was appointed Chief Clerk in the office of Auditor of Disbursements. June 1, 1875, he was appointed Assistant Auditor of Disbursements, and on January 1, 1892, was appointed Auditor of Disbursements, succeeding the late Thomas R. Davis. Mr. Greene is entirely conversant with all disbursement accounts, and has a general knowledge of other accounts of the Company, having been Chief Clerk to the Comptroller for a year and a half. The wonderful memory of Mr. Greene enables him to handle the vast amount of details connected with his office with ease and dispatch.

The Auditor of Star Union Line, John T. Denniston, is in charge of accounts pertaining to earnings and expenses of Union Line traffic—through freight to and from the West via Pittsburgh—and was born in Pittsburgh, Pa., March 18, 1845; entered the service of Clarke & Company, General Agents of the Pennsylvania Railroad Company, as a messenger, and subsequently holding the position of manifest clerk and bookkeeper until April, 1861, when he enlisted in the Twelfth Regiment, Pennsylvania Volunteers, raised under President Lincoln's call for 75,000 volunteers for three months. On returning from this service he resumed his position with Clarke & Company until August, 1862, when he enlisted again for three years in the One Hundred and Fifty-fifth Pennsylvania Regiment, in which he served until December 31, 1864. Returning to Pittsburgh, he again entered the Pennsylvania Railroad service as clerk at Pittsburgh Transfer Station, remaining there until September, 1866, when he was transferred to the Union Line service as general bookkeeper, which position he held until April, 1875. He was then appointed Auditor of the Union Line, his present position. From May until November, 1887, he also acted as Eastern Manager of Union Line, from the death of the late George B. Edwards until the reorganization of the line, November, 1887, since which time, while retaining the title of Auditor, he has, under the direction of the Manager, a general supervision of all its depart-

ments, being the only line officer located at Pittsburgh, through which point all the Union Line traffic passes. His management of the Union Line Department has been most satisfactory, and he has proved himself entirely able to cope with the various questions that present themselves from time to time. While Mr. Denniston's office is located in Pittsburgh, all the other Auditors have their offices in Philadelphia at the General Office.

The Auditor of Empire Line, Frederick Meade Bissell, is in charge of accounts pertaining to earnings and expenses of Empire Line traffic—through freight to the Northwest via Erie and the Lakes, also to the L. S. and M. S. Railway and its connections. He was born in Philadelphia on December 5, 1842, and entered the service of the Empire Transportation Company April 10, 1873, as a clerk in the Auditor's office. July 1, 1873, he was appointed Chief Clerk to the Auditor of the Erie and Western Transportation Company; April 1, 1874, he was made Assistant Auditor of the Empire Transportation Company, including Green Line and the Pipe Lines; also Assistant Auditor of the Erie and Western Transportation Company and of the Atlantic, Duluth and Pacific Lake Company, with special charge of the accounts of these two Companies. October 17, 1877, when the property and business of the Empire Transportation Company came into the possession of the Pennsylvania Railroad Company, he was appointed Assistant Auditor of the Empire Line, Pennsylvania Railroad, and on March 1, 1878, he was appointed Auditor of Empire Line, Pennsylvania Railroad.

FREIGHT DEPARTMENT.

There are no railroad officials whose work is so little understood and appreciated as those who are responsible for the conduct and success of the Commercial Department, and there is no department more severely and more frequently unjustly criticized from the same lack of understanding and appreciation. The meaning of the famous expression "Make your rate what the traffic will bear" has become so distorted that it has crystallized in public opinion into the belief that the traffic officer will take all he can get, regardless of the equities; or, in other words, that he bases his rate upon his speculation of what he may obtain, and not upon business prin-

ciples. This is all wrong, and emanates from a too frequently found disposition to accept any accusation against a railroad company and its officials that unreason presents to an unreasoning mind.

The expression as a direction for making rates is true and sound. Negatively, it means not to make a charge that will consume the value of the article carried or exclude traffic from the line, whilst, positively, that the transportation part of the commodity's value shall at least represent a shade of profit to the carrier. A resultant of the application of the rule is that if the production cannot bear a profitable transportation charge to a greater or less distant market, it must maintain its market at home and limit its quantity to the demands of that market. There is every reason why a stimulant to over-production is as impolitic for the carrier as it is destructive to the producer. It means waste, and waste means loss. No traffic manager is seriously in business to achieve loss to his company. On the contrary, he is ever alert to bring the consumer and producer together through the mediumship of his lines, so as to receive the commendation of the public as a dividend earner. To him comes for a solution the problem of the nice adjustment between supply and demand, and the necessity for keeping his finger upon the ever-changing pulse of the business world. To him is ever present the always perplexing adjustment of rates between different shippers, classes of articles to be shipped, and localities shipped to and from, to be conducted on such an equitable basis that unjust discrimination shall not ensue. To treat each individual, locality and commodity with equality and fairness consistent with earning a reasonable profit to the carrier is the main aim and object of our reputable railroad companies, and requires the highest order of talent in their Commercial Departments. On this foundation has the Commercial Department of the Pennsylvania Railroad been erected. To it has been entrusted the policies which are to bear upon the future development of this Commonwealth, with its boundless riches of field, forest and mine, and upon the movement of interstate, international and intercontinental commerce. It is organized as follows :

Under the supervision of the Third Vice President, its business is in charge of the Freight Traffic Manager, aided by a General

Freight Agent in charge of local traffic, a General Freight Agent in charge of through traffic, a Coal Freight Agent, eight Division Freight Agents, a Freight Claim Agent, an Eastern Superintendent of the Union Line, and a Manager of the Empire Line. In this department are made all arrangements and rates for the freight traffic over the lines operated by the Company, as well as the necessary negotiations and arrangements with other railroads and transportation companies or individuals having any relation thereto. From thence emanate all instructions to station and foreign agents in commercial matters pertaining to the receiving and forwarding of freight. The headquarters is in the General Office Building, Broad Street Station, Philadelphia.

THE EMPIRE LINE.

The Empire Line is owned and controlled by the Pennsylvania Railroad Company, being its Fast Freight Line for securing through freight business in Western States and Territories and on the Atlantic seaboard, as well as foreign import and export traffic for transportation, primarily over its Philadelphia and Erie Railroad Division, but also over the connections eastward and westward en route to destination.

Previous to 1864, when the Pennsylvania Railroad Company leased the Philadelphia and Erie Railroad, the latter road was without motive power or car equipment, its local trade was undeveloped, there were no lines of vessels on the lakes having the harbor of Erie for their eastern terminus, and no tributary railroad lines from which through traffic could naturally be expected. In attempting to draw traffic from the West it was necessary to look to the Cleveland and Erie Railway at Erie, and its connections, now comprising the Lake Shore and Michigan Southern Railway, and to the Atlantic and Great Western Railway at Corry, now New York, Pennsylvania and Ohio Railroad. The latter road, however, was the natural connection of the Erie Railway at Salamanca, New York, both roads being "broad gauge," 6 feet; whereas the Philadelphia and Erie Railroad was 4 feet 8½ inches, and the roads connecting with it at Erie were 4 feet 8¾ inches and 4 feet 9 inches. The impossibility of establishing any effective through freight

movement in connection with the Atlantic and Great Western Railway, requiring transfer at Corry of freight cars of uneven capacity, was quite apparent, and the only opening for through freight traffic over the Philadelphia and Erie Railroad was from the Cleveland and Erie Railway at Erie and its connections and a group of independent roads east of Milton and Sunbury, the purpose being kept steadily in view that this new freight traffic should not be drawn from lines of railroad tributary to, and which already furnished traffic for, the Main Line of the Pennsylvania Railroad.

The Empire Transportation Company was incorporated in 1865 to perform this function. It made contracts with a number of discordant roads west of Erie, in connection with the Cleveland and Erie Railway, Cleveland and Toledo Railway, Michigan and Southern and Northern Indiana Railway, Bellefontaine Railway, Indianapolis and St. Louis Railway, Wabash Railroad—all in the West; and with the Catawissa Railway, Lehigh Valley Railroad, and Central Railroad of New Jersey in the East. This gave it a direct through line from New York to Chicago, about fifty miles shorter than the routes via Buffalo. Agencies were established in the principal Western cities and on the Atlantic seaboard to secure freight traffic on the lines of railroads above mentioned. The Company purchased freight cars, providing them with broad-tread wheels that they might be run with safety and without transfer over the different lines of railroads comprising its route, varying in gauge from 4 feet 8½ inches to 4 feet 9¼ inches. (This was before the days of standard gauge.) These contracts and agency arrangements, and through cars without transfer over the conflicting lines of railroad, constituted the Empire Line, which has since been in continuous operation.

Col. Joseph D. Potts, President of the Company, remarkable for his sagacity, also established agencies in the oil region of Pennsylvania, south of Corry, during the early days of petroleum production in that region. The oil was at first transported in barrels, and subsequently in wooden tanks, on flat cars, but, to decrease the hazard, iron tank cars were afterwards substituted. That the oil might be brought to the rail lines, the Company secured a controlling interest in pipe lines, which were extended, reaching to the

producing sections, and thus controlled the shipments of oil from the wells via the pipe lines to the railroad, thence via rail to the seaboard. To further increase the traffic of the Philadelphia and Erie Railroad he also secured by charter or purchase a fleet of vessels on the lakes, to divert to Erie, Pennsylvania, some of the grain and flour business which had made the fame of Buffalo. This line of vessels was operated as the Anchor Line in connection with the Empire Line. In October, 1877, the Pennsylvania Railroad purchased the Empire Line.

THE ANCHOR LINE.

The Erie and Western Transportation Company, popularly known under its trading title "The Anchor Line," was incorporated in June, 1865, becoming then a part of the general transportation and terminal system supplied by the Empire Line, and was operated in connection with it until October, 1877, since which time this line has been operated independently. Colonel Joseph D. Potts was the President of the Erie and Western Transportation Company from its organization until June, 1881, when he was succeeded by F. J. Firth, who continues to occupy that position.

The Anchor Line, through its fleet of seventeen steam vessels on the Great Lakes, extends the Pennsylvania Railroad transportation system from Erie to all important Western ports on Lake Superior and Lake Michigan, and, through direct rail connection at those ports, to and from the vast interior regions, west, northwest and southwest thereof, having prominent representatives at all important points. In transferring and caring for the large business interchanged between the lake and rail at Erie the Anchor Line uses over thirty-five acres of docks, with spacious freight houses and large grain elevators. These grain elevators have a storage capacity of 1,250,000 bushels, and can unload from lake vessels 30,000 bushels per day. The Anchor Line owns at Chicago and Milwaukee extensive docks and warehouses, and the lake fleet and terminal facilities thus provided for the care of the lake and rail traffic of the Pennsylvania Railroad system far surpass in extent and efficiency the facilities of any of its trunk line competitors.

John E. Payne, Eastern Manager of the Anchor Line, has a

record of long service in Pennsylvania Railroad interests. He entered the service in 1861 as Acting Agent at Erie, was subsequently Assistant to Superintendent William A. Baldwin; next engaged in the organization of the Empire Line; subsequently in the organization of the Anchor Line, with which he still remains.

E. T. Evans, the Western Manager, is a member of a family long and favorably known in the development of lake transportation. His entire life has been devoted to the care of lake vessel interests, and he has held his present position in the Anchor Line for a good many years, and is a competent and efficient officer.

GREEN LINE.

The Green Line, now so widely and extensively known throughout the country, was a branch of the Empire Transportation Company, and continued as such until October 17, 1877, when the Pennsylvania Railroad purchased the Empire Transportation Company, and both the Empire and the Green Lines became part of that system.

Shortly after the Empire Line commenced business, in the autumn of 1865, the production of petroleum in and around Titusville, Pa., had increased so extensively and the shipments of oil by the Empire Line had become so heavy that it was considered advisable by the officers of that corporation to concentrate them under a subordinate line, which was first known as the Allentown Oil Line, but subsequently changed to Green Line. At this time the oil was carried in barrels only; but subsequently, owing to the difficulty in obtaining barrels enough to provide for the increasing production, three wooden tanks were built inside of rack cars, with a total capacity of about 75 barrels. These, however, owing to the leakage and the great danger of fire from locomotives and passing trains, proved unsatisfactory, and a number of devices were used to improve the transportation of oil in bulk, none of which proved satisfactory until the present style of iron cylindrical tank cars were built, which now aggregate about 12,000 cars owned by all tank car lines, of which the Green Line owns 1100.

The Green Line has control of all carload shipments of petroleum and its products eastbound over the Pennsylvania Railroad

system (whether in tank cars or barrels), originating on its own or tributary roads, from the Lima (Ohio) District in the West, Buffalo in the Northeast, and Marietta, Ohio, in the Southwest, to Boston, New York, Philadelphia, Baltimore and intermediate points in the East; to Hagerstown, Alexandria and Richmond in the South, the gateways for distribution to all points in the South and Southwest.

At Phillipston, on the Allegheny Valley Railroad, 66 miles below Oil City, are the repair shops of the Green Line, where all its cars are overhauled, repaired and rebuilt, as occasion requires. The dangerous character of the lading carried renders it imperatively necessary that they should be kept in the best condition, and it is gratifying to note that in the past thirteen years no wreck has been caused by the defective condition of these cars.

Oil City, Pa., the headquarters of the oil producing interests, is also the headquarters of the Green Line, possessing better advantages of distribution for both the crude and refined interests than any other point that could have been selected. Here all the oil is manifested from tallies received daily from all the various loading points throughout the oil regions, with the exception of that loaded at Cleveland and Buffalo, where separate agencies are maintained.

William J. Brundred was the first General Agent of the Green Line, and continued as such up to the time of his death in August, 1889, when Charles T. Hallowell, the present General Agent, was appointed to succeed him.

William H. Joyce, Freight Traffic Manager, was born in Baltimore, Maryland, in September, 1854, and entered the railway service in that city when but 15 years old as a messenger in the local freight station of the Northern Central Railway. Earning his way to promotion through the various grades of clerical positions open for him at that station, he so completely and conscientiously followed the details of the work that he not only laid the foundation of his future usefulness in the Commercial Departments of railway transportation, but caused his promotion to a clerkship in the General Freight Office of the same Company when but 20 years of age; from 1874 to 1878 he continued as a clerk, advancing by industry and study until in the latter year he was made Chief Clerk



W. H. JOYCE



C. A. CHIPLEY



J. B. THAYER, JR.



J. G. SEARLES

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in the office. This latter position he held until, in 1882, he was made the Division Freight Agent of the same road and the Baltimore and Potomac Road. On the 20th of July, 1885, he was promoted to the position of Coal Freight Agent of the Pennsylvania Railroad, one of the most delicate and important positions on the general staff, and rendered such efficient service and displayed such aptitude in his line that in October, 1888, when but 34 years of age, he was called to the position of General Freight Agent of the Pennsylvania Railroad. On February 10, 1897, he was further promoted to be Freight Traffic Manager.

Charles A. Chipley is General Freight Agent. His duties are generally what his title implies, and his territory is co-extensive with that covered by the Pennsylvania Railroad, Northern Central Railway, Philadelphia and Erie, Philadelphia, Wilmington and Baltimore, West Jersey, and Camden and Atlantic Railroads. He has charge of local and all other freight traffic excepting through, coal and coke.

Mr. Chipley is a native Virginian, having been born at Alexandria, in that State, on the 2d day of February, 1836. He entered the railway business in 1869 as clerk for the North Missouri Railroad, St. Louis. In 1870 he became identified with the freight department interests of the Baltimore and Ohio Railroad Company, serving them in 1870 and 1871 as clerk in General Freight Office, Baltimore; 1872, Agent at Pittsburgh; 1873, Assistant General Freight Agent, Pittsburgh; 1874, General Eastern Agent at Boston, Mass.; 1875 and 1876, General Manager of Northwestern Dispatch, and in 1877, again as Assistant General Freight Agent at Pittsburgh. In 1878 and 1879 he was the General Freight Agent of the Pittsburgh and Lake Erie Railroad, with office at Pittsburgh. His service with the Pennsylvania Railroad Company began in 1880 as General Agent of the Star Union Line, Pittsburgh. He continued in that position until 1883, when he was appointed Division Freight Agent of Pennsylvania Railroad, Pittsburgh, which he retained until 1890, when he was promoted to be Assistant General Freight Agent. On March 10, 1897, he was further promoted to be General Freight Agent in charge of local traffic.

J. B. Thayer, Jr., General Freight Agent, has charge of through freight traffic, which is comprised in that which passes through the Niagara frontier, Erie, Pa., Pittsburgh, Pa., Hagerstown, Md., Alexandria, Va., Portsmouth and Norfolk, Va. He was born April 21, 1862. After leaving the University of Pennsylvania in 1881 he entered the service of the Pennsylvania Railroad Company as clerk in the Empire Line office, in which position he served for about eighteen months, when he was transferred to the General Freight Department, Pennsylvania Railroad, serving for two years in the Bureau of Claims, where all claims for loss of and damage to freights are settled. Passing from the Bureau of Claims to that of Rates, he spent eighteen months in mastering the intricate problems presented there. At the expiration of that period John S. Wilson, then General Freight Agent, utilized his services in special directions, which took him to various points of the system, familiarizing him with the line. Whilst engaged in this special work he spent two months in Pittsburgh among its varied interests in their relation to transportation. Upon the reorganization of the Freight Department, with Mr. Wilson as General Freight Traffic Agent, Mr. Thayer was made Chief Clerk, which position he occupied for three years, when he was promoted to Freight Solicitor of the United Railroads of New Jersey Division. In February, 1889, he left the service of the Pennsylvania Railroad Company and connected himself with the firm of George B. Newton & Co., in the anthracite and bituminous coal trade. He remained in that connection for three years, and, although most pleasantly situated, he found that his ambitions led him far more strongly towards railroad work than towards commercial pursuits, and sacrificing what promised a greater financial return he re-entered the service of the Pennsylvania Railroad on the 1st of May, 1892, by accepting the position of Division Freight Agent of the Philadelphia, Wilmington and Baltimore Railroad and Northern Central Railway. On December 1, 1894, he was promoted to be Assistant General Freight Agent, and on March 10, 1897, General Freight Agent in charge of Through Traffic.

J. G. Searles, the Coal Freight Agent, has special charge of the coal and coke business of the Company, and, under the authority



GEORGE M. BALL



W. H. DRAYTON, JR.



GEORGE T. SMITH



FRANK D. HOWELL

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of the General Freight Agent, names the rates of transportation in those commodities, and adjusts with the Division Freight Agents all matters pertaining to them. His duties bring him in such close relations to the great fuel product interests of the State of Pennsylvania in particular, and the country at large in general, that he is one of the best advised men in the country in all that pertains to those interests. He was born at Tiffin, Ohio, December 20, 1848, and after obtaining the advantages of such education as is open to boys up to 16 years of age, he entered the employ of the Dayton and Michigan Railroad as clerk in their office at Lima, Ohio, in October, 1864. After nine months' service there, he went, in June, 1865, to Franklin, Pennsylvania, and engaged as clerk in the freight office of the Atlantic and Great Western Railroad, continuing in the service of that Company as clerk at Franklin, Reno and Oil City until March 1, 1867, when he was appointed Agent of the Farmers' Railroad at Petroleum Centre. This latter road was subsequently purchased by the Warren and Franklin Railroad, which was afterwards merged with the Oil Creek Railroad into the Oil Creek and Allegheny River Railroad. He remained in the service of that Company as agent at various points until October 1, 1871, when he was appointed Joint Agent, at Irvineton, of the Philadelphia and Erie Railroad, Empire Line, and Oil Creek and Allegheny River Railroad. On March 1, 1877, he was transferred from Irvineton to Baltimore, at which place he assumed duty as Agent of the Empire and Anchor Lines. With this training he was ripe to receive the appointment of Division Freight Agent of the Baltimore Division of the Northern Central Railway and the Baltimore and Potomac Railroad, with office in Baltimore, which came to him in July, 1885. His position as Division Freight Agent brought him into close contact with maritime transportation, with the coal fields and their relations to the seaboard, the grain markets of the world and the ever-moving business life of a great city, and being a close observer and hard worker he ripened for the promotion to his present position, to which he was appointed May 1, 1892.

George T. Smith, the Eastern Superintendent of Union Line, with headquarters in New York City, was born in New York June 29, 1855, and was graduated from the public schools to the College

of the City of New York in June, 1870. In June, 1872, he entered the service of the Pennsylvania Railroad Company as messenger in the office of the New York Superintendent of the Union Line, since which time he has been consecutively bill of lading clerk, rate clerk, custom house clerk, cashier and Chief Clerk to General Agent, New York; Agent, Pennsylvania Railroad Company at No 1, Astor House, and 433 Broadway. On June 15, 1897, he was appointed Eastern Superintendent, Union Line.

Franklin Davenport Howell, the Freight Claim Agent, examines all claims for damage to or loss of freight, transmitting such as are valid, under approval of the General Freight Agent, to the proper disbursing officer for payment.

The organization of this bureau of the General Freight Department as it exists to-day is a creation of Mr. Howell's. Its march toward perfectness, directed step by step by his controlling mind, has been accompanied by a more careful handling and a closer surveillance of the property confided to the Company's care for carriage, with a corresponding decrease in the number of claims to be paid, and has demonstrated the wisdom of the creation of the bureau and the choice of its head.

Mr. Howell was born in Philadelphia on the 25th day of March, 1843.

Mr. Howell, at the age of 16, preferred to assist in the support of his family to going to college, as he might have done, and entered the office of the Secretary of the Philadelphia and Trenton Railroad Company, then located in Bloodgood's Hotel, at the corner of Delaware avenue and Walnut street, second floor, and served there as clerk and Assistant to the Secretary, Mr. James Morrell, until 1861, when his patriotism incited him to write to President Lincoln, requesting an appointment as a Second Lieutenant in one of the new regiments about to be raised, on the ground that his grandfather had been an officer in the Revolutionary War, his father an officer in the War of 1812, and that he desired to serve his country in the war then threatening its safety.

In a short time he received a commission as a First Lieutenant in the 17th United States Infantry, General Heintzelman commanding. He served with credit in the various campaigns in which his

regiment was engaged, and in 1864, having resigned on account of shattered health, due to wounds and exposure, was appointed to the charge of a department of the Delaware and Raritan Canal, where he remained until the lease of the Philadelphia and Trenton Railroad, the Camden and Amboy Railroad, New Jersey Railroad and the Delaware and Raritan Canal by the Pennsylvania Railroad Company threw him out of position, the different system of accounts rendering his department unnecessary.

When the lease of the United Companies of New Jersey went fully into effect Mr. Howell was sent for by Mr. John Edgar Thomson, then President of the Company, and asked to accept a clerkship in the office of Mr. Stephen B. Kingston, then General Freight Agent of the Pennsylvania Railroad Company, located at the southwest corner of Thirteenth and Market Streets, until something more suitable could be found, and the request was complied with. Mr. Thomson's failing health prevented any further move in this direction, and Mr. Howell set himself to work to make an impression where he was, and, starting to copy live stock manifests, soon became a general utility clerk and familiarized himself with every detail of the department. In 1877 he took a carbine and went with the City Troop to Pittsburgh, and on his return was directed to prepare for settlement by the County of Allegheny all claims made for loss of or injury to property by reason of the riots at or near Pittsburgh that year, and the time and labor given to this was doubtless the cause of his drifting into the claim business and his promotion to his present position.

In 1887 he assisted in organizing the Freight Claim Association, which now embraces most of the important roads in the country. In 1888 he was elected Vice President and in 1889 President of the Association.

George M. Ball, the Manager of the Empire Line, is a native of Philadelphia. His first business experience was with a shipping commission firm in this city controlling lines of packets to Boston, Providence, and the eastern coastwise ports; also vessels engaged in the forwarding of supplies during the Civil War. His duties were largely in connection with the transportation business of the firm, and brought him into contact with Messrs. Leech & Company, Eastern

Agents of the Pennsylvania Railroad, who were interested in establishing the Empire Transportation Company, and he entered the service of that Company in January, 1868, in the office of Mr. Robert W. Smith, then Eastern Superintendent, Williamsport. Under him he had valuable experience in the early organization of the line, particularly in the oil region.

On the retirement of Mr. Smith in 1871 he was promoted to be Eastern Superintendent, which position he held for ten years, when he was appointed to his present position as Manager, and since then he has operated it for through merchandise business on substantially the same lines as originally established.

W. H. Drayton, Jr., Division Freight Agent of the United Railroads of New Jersey Division, with office at Broad Street Station, was born in Philadelphia November 22, 1860, and received his education in that city and Concord, N. H. He attended Dr. John W. Farres' school in Dean street, Philadelphia, Pa., St. Paul's school, Concord, N. H., and was graduated in 1881 from the University of Pennsylvania in the Department of Arts. In December of that year he entered the service of the Pennsylvania Railroad Company as clerk in the freight office at Sixteenth and Market streets. He was transferred from there to Dock Street Station, and thence, in the summer of 1884, to the Freight Claim Agent's office. In 1886 he entered the rate bureau of the General Freight Agent's Department, and continued as clerk and as Chief Clerk until November, 1896, when he was appointed Acting Division Freight Agent. June 10, 1897, promoted to Division Freight Agent.

William John Rose, with official headquarters at Harrisburg, Pa., has jurisdiction as Division Freight Agent of that portion of the Pennsylvania Railroad covered by the Philadelphia, Schuylkill and Frederick Divisions.

Mr. Rose was born October 5, 1852, at his paternal ancestral home, "Erin Hill," Pittsburgh. In his early infancy his parents removed with him to New York City, and were among the earliest passengers to avail themselves of the modern facilities of transportation offered by the Pennsylvania "all rail" route over the Allegheny Mountains.

He became a resident of Washington towards the close of the



W. J. ROSE



GILBERT H. COBB



S. L. SEYMOUR



C. E. KINGSTON

Buchanan administration, his father being connected with the State Department. Upon the breaking out of the Rebellion he returned to Pittsburgh, and remained there during its continuance. Removing to Philadelphia, with the advent of peace, his family affiliations soon brought him in contact with the progressive Pennsylvania Railroad developments of the time, among which was the recognized necessity for the construction of a projected independent line to connect the Philadelphia and Erie Road with the oil regions. This was accomplished in the building of the Warren and Franklin Railroad. A. J. Cassatt became Superintendent of this line, and it was at his headquarters Mr. Rose served his actual railroad apprenticeship. To the close personal association with and skilful though kindly discipline and instruction of Mr. Cassatt, Mr. Rose always attributes whatever measure of ability he has developed in later years in the Company's service. When Mr. Cassatt was made Superintendent M. P. & M., Mr. Rose temporarily accompanied him to Altoona, returning later to Irvineton, and subsequently accompanying the headquarter's force to Corry, to which point the General Offices were removed in consequence of the absorption of the Farmers' Railroad and the Oil Creek, forming what was subsequently known as the Oil Creek and Allegheny River Railroad. This experience afforded Mr. Rose exceptional opportunities for acquiring a more varied and practical knowledge of his chosen vocation than Altoona seemed to promise at the time. It was at this period that he became actively engaged, first at Cincinnati and finally at Pittsburgh, with the Pennsylvania and Ohio Anthracite Coal and Transportation Company, formed by A. J. Cassatt and other friends of the Pennsylvania Railroad for the purpose of relieving the Company of the embarrassment caused by the want of lading for the large percentage of cars moving empty westbound. The object for the promotion of the coal company having been attained, he was made General Freight and Passenger Agent of the Pittsburgh, Virginia and Charleston Railroad, and continued so during the eight years of its existence under separate organization, and finally, when it became part of the parent system as the Monongahela Division, he continued to devote his energies to the commercial interests of that territory, to which was added the

larger field of the main line and branches in Western Pennsylvania. In the fall of 1879 he was transferred to Harrisburg, succeeding W. C. Ward as General Agent, Pennsylvania Railroad and Northern Central Railway Fast Local Freight Lines, having for their object the development of the merchandise traffic to and from interior Pennsylvania and New York, Philadelphia and Baltimore. Upon the reorganization of the General Freight Agent's Department, January 1, 1886, he was appointed to his present position. Since his assignment to his present duty he has become identified in many and varied ways with the commercial and industrial welfare of his district. He is connected with the Railroad Men's Christian Association of Harrisburg as a member of the Advisory Board and Treasurer of the Building Fund, and a Manager of the Harrisburg Hospital. In religion he is a Churchman, holding the office of Rector's Warden in St. Luke's parish, Cumberland County, where he resides upon a large farm fifteen minutes' ride from his office, and where, as a lover of nature, he devotes his leisure moments to his favorite diversions—horticulture and agriculture.

Gilbert H. Cobb, Division Freight Agent, with office at Altoona, was born in Baltimore, Maryland, March 1, 1857. His parents removed to Sunbury, Pa., in 1861, and to Treverton, Pa., in 1869. He attended the public schools in both the latter places, and subsequently took a short course at the Elysburg Academy, located at Elysburg, Pa. He removed to Herndon, Pa., in 1872, with his parents, and after a short term at school entered the freight station of the Philadelphia and Reading Railroad Company at that point as office boy. On May 1, 1874, having resigned from the Philadelphia and Reading service, he entered that of the Philadelphia and Erie Railroad as yard clerk at Sunbury. He was transferred in 1878 to Weigh Scales, Pa., on Shamokin Division, as clerk, and in 1881 to a clerkship in the office of the Superintendent of the Sunbury Division, continuing there until 1882, when he returned to Weigh Scales. In the following year he was promoted to assistant agent there, and in 1883 promoted to be agent at Nanticoke, Pa. In 1884 he was made freight agent at Wilkesbarre, Pa., and in 1891 was made agent at Scranton, Pa., with duties as soliciting freights on the lines of the Delaware and Hudson Canal Company,

New York, Ontario and Western Railroad, Delaware, Lackawanna and Western Railroad, Rutland Railroad, Fitchburg Railroad and Central Railroad of New Jersey. On June 1, 1897, was made Division Freight Agent.

Samuel L. Seymour, Division Freight Agent, has his office in Pittsburgh. His large and important territory is that embraced within the limits of the Pittsburgh, West Pennsylvania and Monongahela Divisions. He was born at Cleveland, Ohio, August 14, 1849, and has served the interests of the Pennsylvania Railroad Company for a continuous period of a quarter of a century. Like the most of his co-laborers in the commercial field of railroad transportation, his training began early in life, before his boyhood days were fairly over. The waters of the Great Lakes and the forests of Pennsylvania were the books from which he studied to so perfect himself that he was capable of filling that wonderful field of industry that has the head of the Ohio for its centre, the position he now occupies. His long service began on October 22, 1868, in the office of the General Western Freight Agent of the Northern Central Railway at Buffalo, whose Chief Clerkship he relinquished on May 1, 1876, to assume the duties of Western Passenger Agent of the road at Buffalo. The "Centennial Year" was a very trying one for men in his position; rest seemed almost impossible to attain so long as the great Exposition was open to the public, but he acquitted himself in such manner as to meet the approval of the public and the commendation of his superiors. On April 1, 1879, his duties were enlarged and he became the Western Passenger and Freight Agent, and continued acting as such until December 1, 1882, when he was appointed Division Freight Agent of the Philadelphia and Erie Railroad and Northern Central Railway, with office at Williamsport. On January 1, 1890, he was promoted to be Division Freight Agent of the Pennsylvania Railroad at Pittsburgh. Mr. Seymour is an elder in the Presbyterian Church, an assistant superintendent of his Sunday-school, and a member of the Board of Management of the P. R. R. Department of the Y. M. C. A. in Pittsburgh.

Charles E. Kingston, Division Freight Agent of the Philadelphia, Wilmington and Baltimore Railroad Company, with office at Wil-

mington, Delaware, was born in the City of Philadelphia on May 12, 1858. He was educated in private schools, from which he graduated in 1877. In October of that year he entered the Pennsylvania Railroad service as clerk at Dock Street Freight Station. On the 1st of January, 1880, he was transferred from there to the General Freight Agent's office, and filled various positions in that department until October 1, 1885, when he was made Chief Rate Clerk, a position he filled with signal ability until January 1, 1890, when he was promoted to be Chief Clerk to the Assistant General Freight Agent. On May 28, 1897, he was appointed to the vacancy caused by the death of George Stephens. His appointment took effect June 1, 1897.

Mr. Kingston is a son of the late Stephen B. Kingston, who, as the right hand man of the late Henry H. Houston, and afterward as General Freight Agent of the Pennsylvania Railroad Company, aided in laying the splendid foundation upon which the commercial prosperity of the Company rests.

In addition to his father's comprehensive knowledge of trade conditions and requirements, which Mr. Kingston inherits in a large degree, his training has made him one of the leading younger men in the commercial departments of transportation.

George Dallas Dixon is the Division Freight Agent of the Philadelphia, Wilmington and Baltimore Railroad, and the Northern Central Railway. His office is in Baltimore, and his authority extends over the Baltimore Division, Northern Central Railway, and the Baltimore and Potomac Railroad and Washington Southern Railway.

Mr. Dixon was born in Philadelphia on March 28, 1857. His first business experience was obtained in the service of the Pennsylvania Warehousing and Safe Deposit Company, with whom he remained for three years, resigning on account of ill health. After a few years of rest he accepted a position in the General Freight Department of the Pennsylvania Railroad Company, starting in the Claim Department, from whence he was transferred to the Rate Department, filling different positions there until he finally became Chief Rate Clerk, which position he occupied when called upon to take the Division Freight Agency in Baltimore December 1, 1894.



GEORGE D. DIXON



W. E. FRASER



E. W. COFFIN



CHARLES T. HALLOWELL

William E. Fraser is Division Freight Agent of the Philadelphia and Erie Railroad and Northern Central Railway, with his office at Williamsport, Pa. His jurisdiction is the Eastern, Middle, Western and Sunbury Divisions of the Philadelphia and Erie and Elmira and Canandaigua, Sodus Bay, Susquehanna, and Shamokin Divisions of the Northern Central. Mr. Fraser was born in Lewiston, N. Y., September 17, 1854. He went to the common schools until he was 14 years of age, when he entered the service of the Lake Shore and Michigan Southern Railway Company as ticket clerk, remaining in such employ until March 31, 1876. On the 1st of April, 1876, he became Traveling Passenger Agent of the Northern Central Railway Company, and has remained continuously in the service of that Company, filling the positions of Traveling Freight and Passenger Agent, Agent at Buffalo for New York State and Canada District, and his present position, to which he was appointed June 1, 1890.

E. W. Coffin is the Division Freight Agent of the West Jersey and Camden and Atlantic Railroads, with office at Camden, N. J. He was born at Hammonton, Atlantic County, N. J., June 5, 1824, and was appointed Agent of the Camden and Atlantic Railroad at Camden in 1870. In 1871 he was made General Freight and Express Agent of that road, and continued in the position until the road passed under the control of the Pennsylvania Railroad Company in May, 1883, when he was appointed to and accepted the position he now occupies.

Charles T. Hallowell, General Agent in charge of the Green Line, was born in Philadelphia on the 19th of March, 1840. He received a liberal education in the schools of that city, and on the breaking out of the war entered the United States Navy, in which he served with distinction on the United States gunboat Delaware in all the engagements in the North Carolina waters, the reduction of the forts on Roanoke Island, Elizabeth City and New Bern; also in the James and Potomac River campaigns, in which that vessel took a prominent part. He then joined the United States gunboat Unadilla on blockade duty off Charleston, but was shortly afterwards ordered to the United States monitor Kaatskill, on which vessel he participated in the engagements which resulted in the

capture of Morris Island and the reduction of Fort Sumter, shortly after being promoted to a position on Rear Admiral Dahlgren's staff.

Mr. Hallowell left the navy in the autumn of 1864, and in October of that year began his railroad career as clerk in the freight office of the Philadelphia and Erie Railroad at Lock Haven, Pa. He remained there only two months, however, when he was made Chief Clerk to Mr. Frank Thomson, then temporarily assigned as General Superintendent of the Oil Creek Railway. On Mr. Thomson's return to Williamsport, Mr. Hallowell was made Chief Clerk of the Empire Transportation Company, and worked all through its organization, subsequently being placed in charge of the Empire Individual Line, which, after the purchase of the Empire Line by the Pennsylvania Railroad Company, was changed into what is now known as the Pennsylvania Fast Local Freight.

After a year spent in California, Mr. Hallowell returned home and re-entered the railroad service as car agent of the Philadelphia and Erie Railroad, subsequently receiving the appointment as assistant to Superintendent Westfall in organizing the Sunbury Division, which position he held until the spring of 1876, when he was transferred to Philadelphia as an aid to Mr. Charles E. Pugh, General Agent during the Centennial year, after which he succeeded Mr. Latta as Superintendent of both the Washington Street Grain Elevator and the Grain Depot at West Philadelphia, during which time he represented the Pennsylvania Railroad Company on the floor of the Commercial Exchange, which positions he held until November 1, 1889, when he was appointed to the responsible position he now holds.

To Mr. Hallowell belongs the credit of first suggesting the foundation of a relief organization for the benefit of railway employees. This was in 1875, but as the Company was not then prepared to take up the matter, it was deferred to a later period. In 1878 he submitted a scheme, which was supplemented by another in 1880, which attracted the attention of the managers of the road, who, recognizing the advantages to be derived from a better conservation of the interests of its employees by making some provision for them during sickness or injury, and that their families

would not be wholly unprovided for in case of death, took measures to perfect an organization of which the present one is the result, the wisdom of which has been fully demonstrated and appreciated by all classes of employees.

THE PASSENGER DEPARTMENT.

The duties and work of the passenger branch of the commercial department of railroads, like those of the freight branch, are but little known, understood or appreciated. With the increase of national wealth and development, largely the product of railway construction, has come greater ease and luxury to the people, causing almost an extravagant demand for advanced accommodations for passenger travel unheard of and undreamed of twenty years ago. This demand must be listened to and met to a great extent by all railroad lines seeking popularity, for no railroad can live to-day and do a paying business without a favorable public opinion. The creation of this public opinion is to a large extent the work of the Passenger Department, and requires of its officials a close study of social, industrial and political conditions. Those officials have to deal with the personality of humanity, which is always selfish—rarely generous. To cater to the comforts, pleasures, necessities and whims of an individual is a duty to perform, not to be sought, and demands a superior order of ability, tact and diplomacy upon the part of those chosen for its performance. When the individuals consolidate into communities, and when the conflicting interests of such communities have to be considered and adjusted upon a basis of individual satisfaction, the task of the General Passenger Department becomes one of great perplexity and arduousness, to be performed with the utmost delicacy of touch.

It is estimated that the revenues of American railroads are derived from the various sources in the following proportions : 70 per cent. from freight carrying, 25 per cent. from passenger receipts, and 5 per cent. from mail, express and other contracts. These figures, so far as they relate to the work and influence of the Passenger Department, are deceptive, and do not give credit where credit is due, for there is no gainsaying the fact that all descriptions of railroad business is advanced to the line by the popularity growing out

of the Passenger Department securing for the public convenient and well-kept stations, good train service, luxuriantly equipped cars, low fares, and polite attention.

Upon the idea of securing such benefits to its stockholders the Pennsylvania Railroad Company has organized its Passenger Department.

The General Passenger Agent has general supervision of the passenger traffic of the Company in all its wide ramifications both at home and abroad. The relations of the Company with other lines in matters relating to the passenger business, the making of rates, the adjustment of the proportions to be divided among connections and the issue of all kinds of tickets used in passenger travel are the important prerogatives of his department. He is called in consultation with the General Manager in the preparation of passenger time tables, and is largely instrumental in arranging the schedule of through cars which run from his to other lines. He deals directly with the public at all times through the communicating medium of the press, the various advertising devices, by correspondence and by interview.

Nine District Passenger Agents, in charge of a like number of districts, keep watchful eyes especially on the competitive business originating in their respective territories. Their duties require them to be conversant with the movements of all organizations and associations, and to secure the patronage of such bodies if possible. They must also communicate freely with the ticket agents, advise and instruct them, and possess an accurate knowledge of the possibilities and probabilities of the traffic to be derived from the section of country bounded by their territorial limits.

A General European Passenger Agent with headquarters in London is charged with the care of the British and Continental interests of the Department.

The Assistant General Passenger Agent is the chief aid of the General Passenger Agent, discharging specific functions of the Department, special duties under the direct instruction of the Vice President, and acting for the General Passenger Agent in his absence.

The Assistant General Passenger Agent has charge of local traffic

on the lines east of Pittsburgh, and is aided by six Division Ticket Agents. Each of these is charged with the care of the business of a grand division of the system. They must prepare and provide the local tickets of their respective divisions, make the rates therefor, and nurture with zealous care the development of local traffic within their divisional boundaries.

Through these assistants, who are located at important centres of the system, the Department is kept constantly informed as to the situation from a passenger standpoint in every portion of the great territory from which the revenue is drawn.

The position of the General Passenger Agent may well be likened to that of the commander-in-chief of an army. The organization is much the same, and the orders to the sub-commanders have often to be executed with as much precision and promptness as if they proceeded from a General in the face of an enemy.

The direction of a business of such magnitude necessitates the co-operation of other important subordinates. The immediate representatives of the General Passenger Agent and the Assistant General Passenger Agent are their chief clerks. These officials administer the detailed operations of the Department, and aid materially in the disposition of the routine affairs of the office. The Advertising Agent renders important service. He is charged with the preparation and publication of the time tables, books and pamphlets and advertising matter of every description. He makes and records contracts with all newspapers for advertising, prepares the bills for payment, and is the direct representative of the Department in all its relations with the press.

The Tourist Bureau, inaugurated several years ago for the promotion of pleasure travel, is a decided innovation on old-time methods. It has achieved a marked success and opened up new sources of revenue.

An important bureau of the Department is devoted to the redemption of unused or partly-used tickets. Its management involves the most careful judgment and the exercise of great discretion. The fair and equitable rules under which the redemption of tickets is made are appreciated by the public to such an extent that each year shows a material increase in the business of the bureau.

The preparation and distribution of the tickets of the Company to its 1200 agents is an important feature of the work. A Foreign Ticket Supply Clerk, under the supervision of the Assistant General Passenger Agent, and a Local Ticket Supply Clerk, handling the tickets prepared by the Division Ticket Agents, are in charge of this bureau, which handles 60,000,000 tickets annually.

The Rate and Division Bureau of a great trunk line is a distinct feature of the Department, dealing with the intricacies of through rates and their divisions, and involving technical knowledge of this peculiarly complex branch of the business.

The Baggage Department, under the supervision of the General Baggage Agent, comes directly under the charge of the General Passenger Agent. This Department handles more baggage than any similar department in the world. The very nature of baggage necessitates promptness in handling, and in the past few years wonderful progress has been made in this direction through the special delivery system.

James R. Wood, General Passenger Agent, was born in Auburn, N. Y., in 1843. He commenced his railroad career in 1869 as Secretary to the Superintendent of the Burlington and Missouri River Railroad, at Creston, Iowa. From this post he was advanced to the position of Trainmaster, which he held until 1871, when he was appointed General Western Passenger Agent of the same road, with office at Chicago. In 1873 he became General Ticket Agent of the Burlington and Missouri River Railroad in Nebraska, and subsequently Western Land and Passenger Agent. After a short service in this capacity he was appointed General Agent of the Michigan Central Railroad at Grand Rapids, a position which he relinquished after little more than a year's tenure, and became Assistant Superintendent at Jackson, Mich. In 1878 he returned to the passenger branch of duty as Assistant General Passenger Agent, and in September of the same year was chosen General Passenger Agent of the Chicago, Burlington and Quincy Railroad. He continued in this position until April, 1881, when he received the appointment of General Passenger Agent of the Pennsylvania Railroad.



J. R. WOOD



GEORGE W. BOYD



R. M. PILE



SAMUEL CARPENTER

As an evidence of the high appreciation of his ability and his work in the Trunk Line Association, the members of that body tendered him the temporary chairmanship of the Passenger Committee upon the retirement of Lucius Tuttle from that office in 1890. He filled this important chair for six months, and was the unanimous choice of the members for the permanent chairmanship, which he declined, as he preferred to remain in the service of the Pennsylvania Railroad.

George W. Boyd, Assistant General Passenger Agent, was born in Indianapolis, Indiana, August 1, 1848. In 1863 he made his entrance into railroad life through the Freight Department of the Cleveland, Columbus, Cincinnati and Indianapolis Railroad. Indianapolis then was the greatest railroad centre in the country. All the east and westbound freight was transhipped there, and its freight yards were at all times the scene of great activity. For several years Mr. Boyd served as clerk, and subsequently as Chief Clerk of the Freight Department. In June, 1872, he was appointed Cashier of the Passenger Department, Pennsylvania Railroad. He discharged the duties of this office until January, 1874, when he was promoted to the higher post of Chief Clerk. The chief clerkship remained in his hands for eight years, until January, 1882, when the office of Assistant General Passenger Agent was established, and he was installed as its first incumbent.

Rufus M. Pile, Chief Clerk Passenger Department, entered railroad service as a clerk in the General Ticket Office of the Jeffersonville, Madison and Indianapolis Railroad, now a part of the Pan Handle System. After a few years' service he was advanced to the position of Chief Clerk, and for several months served as Acting General Ticket Agent of the above-named road. In June, 1873, he applied for and obtained an appointment as a rate and division clerk in the Passenger Department of the Pennsylvania Railroad at Philadelphia. In September, 1883, he was promoted to the position of Chief Clerk to the Assistant General Passenger Agent, and November 6, 1888, was made Chief Clerk of the Passenger Department. Mr. Pile, in the absence of the General Passenger Agent and the Assistant General Passenger Agent, has charge of the Passenger Department.

Samuel Carpenter, Eastern Passenger Agent, was engaged as a clerk in the General Office on March 1, 1857. The next year he was promoted to the position of Traveling Passenger Agent, with the State of Pennsylvania as his field of operations. In 1860 he was assigned to duty in New England, with office at Boston, and the title of New England Passenger Agent. From Boston he was recalled to the General Office in 1861 and made Advertising Agent. He served as General Baggage Agent from November 1, 1865, to August 1, 1872, when he was appointed Eastern Passenger Agent, with office at New York.

William W. Lord, Jr., Assistant Eastern Passenger Agent, was born in Vicksburg, Mississippi, September 28, 1855. His education was obtained at military and private schools at Vicksburg and Charleston, S. C., where his father was for a time Rector of St. Paul's P. E. Church, Ratcliffboro, and at the High School in the latter city. In 1870 he went as rodman, with the levels, on the survey of the Vicksburg, Ship Island and Pensacola Railroad, and in the following year took service with the Mobile and Ohio Railway at St. Louis as a bill of lading clerk. From 1872 until 1874 he was manifest clerk, and subsequently special grain solicitor for the Iron Mountain Railway. In 1875 he was freight solicitor for the General Agent of the Atchison, Topeka and Santa Fe Railroad at St. Louis, and in 1876 he entered the passenger service of the Santa Fe Route as Traveling Passenger Agent, with headquarters at Cincinnati. In 1879 he transferred his allegiance to the Chicago and Alton Railroad, and after a short term of service was promoted to the post of Southeastern Passenger Agent of the Chicago and Alton, with headquarters at Harrisburg, Pa. He became attached to the service of the Pennsylvania Railroad in 1886 as a Traveling Passenger Agent on the staff of the District Passenger Agent of the Middle District, in which capacity he continued until 1888, when he was transferred to the Tourist Department as Tourist Agent. From July to October, 1891, Mr. Lord performed the duties of Passenger Agent of the Baltimore District as Acting Passenger Agent, and was then created Assistant Eastern Passenger Agent, with headquarters in the office of the Eastern Passenger Agent at New York.



W. W. LORD, JR.



THOMAS E. WATT



COLIN STUDDS



J. K. SHOEMAKER

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Thomas E. Watt, Passenger Agent of the Western District, was born at Monroeville, Allegheny County, Pa., March 30, 1840. Desiring to be a railroad man he went to Philadelphia, and on May 1, 1861, upon his personal application, was given the position of brakeman on a passenger train running between Philadelphia and Pittsburgh. He worked the brakes for three years until October, 1864, when he was promoted to the position of conductor on a passenger train in service on the Pittsburgh Division. On January 1, 1872, he was withdrawn from active work on the road and made City Ticket Agent at 78 (now 110) Fifth avenue, Pittsburgh. In August, 1877, Mr. Watt was appointed Passenger Agent of the Western District, with office at Pittsburgh.

John K. Shoemaker, Passenger Agent of the Middle District, was born at Whitemarsh, Montgomery County, Pa., August 11, 1850. He was primarily educated in the common schools, and finished with a University course. His railroad service began in March, 1869, as a clerk in the office of the General Passenger and Ticket Agent of the Lehigh and Susquehanna Railroad Company at Mauch Chunk. Later he served in a similar capacity in the office of the General Passenger Agent of the Central Railroad of New Jersey at New York, and on August 14, 1871, took a like position in the Passenger Department of the Pennsylvania Railroad. On September 1, 1873, Mr. Shoemaker was appointed Ticket and Ferry Agent at Market Street Wharf, in which position he remained until September, 1877, when he was promoted to the post of Passenger Agent of the Middle District, with office at Philadelphia. On January 1, 1879, his headquarters were removed to Harrisburg. On the death of the late Captain J. N. Abbey the Philadelphia and Middle Districts were consolidated, and Mr. Shoemaker was appointed Passenger Agent of the enlarged Middle District, with office at Philadelphia.

Colin Studds, Passenger Agent of the Southeastern District, was born October 23, 1861, in Fairfax County, Va. He entered the railroad service through the telegraph office in 1876. He began as a student of telegraphy, and developed into an operator on the Alexandria and Fredericksburg Railway at Washington. In June, 1882, he was made stenographer in the office of the

Southeastern Passenger Agent, and subsequently became Chief Clerk and City Passenger Agent. From July 1, 1889, to 1892 he was attached to the Tourist Department as Tourist Agent, and on August 15, 1892, when the Atlantic City District was detached from the Middle District, he was appointed its first Passenger Agent. On August 15, 1894, he was appointed Passenger Agent of the Southeastern District, with office at Washington.

George M. Roberts, Passenger Agent of the New England District, was born March, 1838. His means of education were such as are covered by attendance at common schools in Massachusetts. Prior to entering the railroad service his employment was principally in the grocery and dry goods trade. On September 10, 1865, he entered the service of the Pennsylvania Railroad Company as Ticket Agent in the Boston office, where he continued until September 15, 1869. For one year thereafter he was clerk in the office of the Chief Clerk of Foreign Tickets in Philadelphia, and then returned, March 16, 1872, to Boston, where he was clerk in the Boston office until March 1, 1876, when he was appointed Cashier of the New England Passenger Agency. On March 1, 1882, he was appointed Ticket Agent at Boston, in addition to his duties as Cashier. On January 1, 1887, Mr. Roberts was promoted to the position of New England Passenger Agent, and upon a revision of the titles of the District Passenger Agents on February 1, 1890, he was continued with the same duties, under the title of Passenger Agent of the New England District.

B. P. Fraser, Passenger Agent of the Buffalo District, was born at Lewiston, Niagara County, New York, on June 21, 1852. On December 3, 1870, after having received a common school education, he began his railroad career as telegraph operator at Arcade, New York, on the Buffalo and Washington, now the Western New York and Pennsylvania Railroad. He served as Telegraph Operator and Ticket Agent at various points on the line until May 1, 1874, when he abandoned railroad for commercial pursuits. In November, 1877, he re-entered the railroad service as clerk in the freight office of the New York Central and Hudson River Railroad at Lewiston, N. Y. August 1, 1881, he resigned this position and accepted a clerkship in the office of the Western Freight and Pas-



B. P. FRASER



E. S. YOUNG



B. COURLAENDER, JR.



G. M. ROBERTS

senger Agent of the Northern Central Railway at Buffalo. His connection with that office continued, in the capacity of clerk and Traveling Passenger Agent, until he received the appointment of Passenger Agent of the Buffalo District in 1890.

B. Courlaender, Jr., Passenger Agent of the Baltimore District, was born in Baltimore April 27, 1862. His education was received at preparatory schools, grammar schools and college. Before entering the railroad service he was engaged in manufacturing business and the consular service of the United States Government.

On March 5, 1886, he entered the service of the Pennsylvania Railroad as Ticket Receiver at Baltimore. In May, 1887, he was transferred from the receivership to the office of the Passenger Agent of the Baltimore District, where he served as Traveling Passenger Agent until 1888. During that year he acted for several months as Soliciting Passenger Agent in New York City, and subsequently as Soliciting and Traveling Passenger Agent in the Middle District. On October 1, 1891, he received the appointment of Passenger Agent of the Long Branch District, with office at Newark, N. J., and on October 1, 1896, was transferred to the Baltimore District, with office at Baltimore.

Edward S. Young was born at Wrightsville, York County, Pennsylvania, April 23, 1828. He attended private schools in Wrightsville, Columbia and Lebanon, Pennsylvania, until 1842, when he entered Mercer Academy, Charleston, Virginia. He remained there until 1844, when he entered Washington College, Lexington, Virginia, from which he was graduated in 1846. In 1847 he was employed in Cincinnati, Ohio, selling Kanawha salt, until the 1st of August, when he began his transportation career as a clerk for the Pennsylvania and Ohio Canal on the "Basin," in Columbia. In 1849 he was transferred to the office of the Canal Company, in Philadelphia, where he served until April 1, 1851, when he entered the office of H. H. Houston, Agent of the Pennsylvania Railroad, as shipping, receiving and manifest clerk. When the Northern Central Railway Company was acquired by the Pennsylvania Railroad Company in 1862, Mr. Young was, on August 1, sent to Baltimore to take charge of the Freight and Passenger Department of that portion of the system. The passenger business of the Balti-

more and Potomac Railroad was added to his charge in 1872, and in 1874, upon the reorganization of the Pennsylvania Railroad lines in Maryland, he was appointed Division Ticket Agent of the lines from Marysville, Pa., to Quantico, Va. In addition to these duties, Mr. Young also served as Southeastern Passenger Agent of the Pennsylvania Railroad, from February 1, 1875, to June 1, 1884.

H. J. Fillman, Division Ticket Agent of the United Railroads of New Jersey, was born in Montgomery County, Pennsylvania, December 17, 1843. He was educated in the public schools. He afterwards engaged in mercantile pursuits until 1863, when he enlisted in a Pennsylvania regiment, with which he was mustered out as a non-commissioned staff officer at the close of the War. He then re-entered mercantile life. In January, 1869, he left the counting-house to become a clerk in the general office of the Erie Railway Company in New York. Less than a year he remained with the Erie, when he resigned to accept the appointment of Cashier and principal clerk in the office of the General Passenger and Ticket Agent of the Pennsylvania Railroad Company. Upon a reorganization of the Passenger Department in the early part of 1872 he was appointed Chief Clerk of Foreign Tickets, and when the Department was again reorganized in the following year he was advanced to the post of General Ticket Agent of the United Railroads of New Jersey Division. He still fills this position under the title of Division Ticket Agent, the present title having been created in 1881.

Incidental to this service Mr. Fillman was also Assistant General Ticket Agent of the West Jersey Railroad Company from 1875 to 1880, when the growth of traffic and the extension of the West Jersey system necessitated the appointment of an officer who could devote his services exclusively to the business of that line.

E. S. Harrar, Division Ticket Agent of the Philadelphia and Erie Railroad Division, was born at Horsham, Montgomery County, Pennsylvania, on January 3, 1840. He completed his education at the Normal School in Carversville, Bucks County, Pennsylvania, in 1860, and entered commercial life. His first railroad service was with the Philadelphia and Erie in the Foreign Ticket Supply Department, of which he was placed in charge June 1, 1864, when the



J. R. ERRINGER, JR.



D. C. WALSH



H. J. FILLMAN



E. S. HARRAR

Company occupied the present Lehigh Valley Railroad building on Third street. Six years afterward he was promoted to the office of Chief Clerk to D. M. Boyd, Jr., Assistant General Passenger and Ticket Agent, his special charge being through rates. July 1, 1872, he became Advertising Agent, and February 1, 1874, General Ticket Agent of the Philadelphia and Erie Railroad Division and Northern Central Railway north of Harrisburg. Subsequently, when the organization provided for division ticket agents as assistants to the General Passenger Agent, his title was changed in conformity therewith.

J. R. Erringer, Jr., Division Ticket Agent of the Pennsylvania Railroad Division, was born at Cincinnati, Ohio, September 29, 1838. He was educated in the public schools, and began his business life as a telegraph operator, working on commercial lines at New Albany, Paoli and Madison, Indiana. He entered the railroad service in September, 1859, as Telegraph Operator for the Illinois Central Railroad Company at St. Johns, Illinois. In October, 1860, he accepted a position in the Jeffersonville and Indiana Railroad as Agent and Operator at Vienna, Indiana. In May, 1862, he was promoted to be Superintendent of Telegraph, Ticket Agent and Train Despatcher on the same road at Jeffersonville, Indiana. In November, 1863, he was appointed Southwestern Passenger Agent of the Pennsylvania Railroad Company at Louisville, Ky.

In April, 1870, he was assigned to duty as General Agent of the Company in San Francisco, which position he held for ten years. He returned to the East in April, 1880, to accept the appointment of Division Ticket Agent of the Pennsylvania Railroad Division, with office at Philadelphia.

D. C. Walsh, Division Ticket Agent of the Philadelphia, Wilmington and Baltimore Railroad, was the son of Dr. Francis Winthrop Walsh, Dean of Willoughby University. He was born in the City of New York July 26, 1836. He was educated in the College of New York, and studied engineering. At eighteen years of age he became a member of the engineer corps of the West Jersey Railroad Company. On the completion of this line to Bridgeton he was transferred to the Loan Department of the Camden and Amboy Railroad, and soon after became Chief Clerk of

that road. In April, 1872, he entered the service of the Pennsylvania Railroad, and was placed in charge of the excursion business and rates in the Eastern territory. On January 1, 1882, he was promoted to the position of Chief Clerk of the Passenger Department, which he held until November 1, 1888, when he received the appointment of Division Ticket Agent.

F. J. McWade, General Baggage Agent, was born in Oberlin, Ohio, March 12, 1847. One year after his having been graduated from Oberlin College, in the Class of 1867, he became a clerk in the General Ticket Office of the Cleveland, Columbus and Cincinnati Railroad Company at Cleveland. Soon afterward the scene of his labors was shifted to Indianapolis, where he served as Chief Clerk of the Passenger Department of the Bee Line. Upon the consolidation of the Bee Line with the Cleveland, Columbus and Cincinnati Railroad and the removal of the general office to Cleveland, he withdrew from railroad service and engaged in other business until October, 1877, when he was appointed Advertising Agent of the Pennsylvania Railroad Company. For three years he managed the Advertising Department, after which he relinquished it to accept the newly-created office of General Ticket Agent of the West Jersey Railroad Company. On February 1, 1881, he was promoted to the position of General Baggage Agent, and entered upon the discharge of his duties.

Francis Nelson Barksdale, Advertising Agent, was born in Charlottesville, Va., March 19, 1855. He received his early education in private schools and at the University of Virginia. After being graduated from the latter, he studied law and was admitted to the Albemarle County, Va., bar in 1878. In 1879 he became editor and proprietor of the "Jeffersonian Republican," a weekly newspaper, founded at Charlottesville by James Alexander, who had been resident printer to Thomas Jefferson. After editing and publishing that paper for several years, in March, 1883, he entered the service of the Pennsylvania Railroad Company, and was assigned to duty in the Advertising Department. The entire time of his service since has been devoted to the comprehensive work of that bureau. He was placed in charge of the Department as Advertising Agent in the spring of 1890.



F. J. McWADE



F. N. BARKSDALE

GENERAL MANAGER'S DEPARTMENT.

The position and duties of General Managers vary as widely as the different roads throughout the country vary in importance. In some cases the duties are co-extensive with those of a railroad President, again with those of a Traffic Manager, whilst again, a combination of the foregoing with those of a General Superintendent of Transportation added. The position in the Pennsylvania Railroad Company's organization for conducting its business is at the head of the Transportation Department, and to the occupant comes the supervision of that large body of agents who must collect the enormous revenues of the Company, and that vast army of employees who must keep road, track, bridges and equipments in good order, and who handle the trains with safety. He is the centre around which revolve all the units engaged in the manufacture and sale of transportation, and from which radiate the instructions to those who come in direct contact with the patrons of the line.

His office is in the General Office building at Philadelphia, and he is assisted by a General Superintendent of Transportation, a General Superintendent of Motive Power, an Engineer Maintenance of Way, a Superintendent of Telegraph, General Superintendents, General Agents, a Purchasing Agent and a Real Estate Agent.

The General Superintendent of Transportation has charge on the lines east of Pittsburgh and Erie of the distribution of the car equipment. It is his duty to see that the cars are promptly moved so that the fullest possible service may be performed. At all the Company's stations within the bounds of his territorial jurisdiction he has the general supervision of the manner of loading and forwarding of cars. The movements of all trains on the line is placed under his general oversight. He supervises the numbering and weighing of all cars, and keeps a record of their movements. Prescribed releases for cars of individuals using the line are procured by him. He keeps a record of all cars belonging to the Company, and an account of the amounts that may become due to it for the use of its cars on foreign roads, and of the amounts due to foreign roads for the use of their cars on the roads of the Pennsylvania Railroad, attends to the adjustment of such accounts, and furnishes the Comptroller such

information as will enable the latter to make settlements in Car Service Accounts. He performs such other duties as may be assigned to him by the General Manager, and acts for that officer in his absence.

General Superintendent of Motive Power, with headquarters at Altoona, under the General Manager has the direct supervision and control of the Motive Power Department, in so far as may be necessary to insure the efficiency of the equipment and adherence to the standards and systems of the Company. He furnishes the Superintendents of Motive Power with the copies of all standard drawings, and gives such instructions as may be required to insure uniformity in the construction and repair of all the Company's rolling and floating equipment and machinery. He keeps a complete record of the numbers and condition of all locomotives, cars, floating equipment and machinery moved by the Company, whether upon its own road or upon lines leased or otherwise controlled ; and to enable him to do so, the General Superintendents of the respective Divisions make to him such reports as he may require. He has charge of all tests and experiments, and when made on the line, the instructions therefor being issued through the General Superintendents. In performance of the foregoing general duties he visits the various Division shops from time to time, and makes such suggestions to the respective General Superintendents as he deems necessary for the efficiency and economy of the service.

Engineer Maintenance of Way, acts as assistant to the General Manager in all matters (including the preparation of plans) pertaining to the maintenance of way within the jurisdiction of the Department. He sees that the plans are adhered to after they are made standard by the approval of the General Manager. He also makes thorough and complete inspection of all bridges and other structures. The introduction and carrying out of the standards which insure the uniformity and system for which the Pennsylvania Railroad is noted are duties of no small magnitude and responsibility. He has an oversight of the proper distribution of steel rails for renewals. All signal and interlocking plans are prepared under his supervision.

Superintendent of Telegraph is a member of the staff of the Gen-

eral Manager, and has charge of the construction and maintenance of all telegraph lines owned or operated by the Company, the distribution and economical use of construction and repair supplies, and is in general responsible for the efficiency of the service.

GENERAL SUPERINTENDENTS.

The General Superintendent on his proper Division has charge of the real estate and personal property of the Company on it, including shops, stations and floats, telegraph lines, motive power, rolling stock and floating equipment, and all other property connected with its offices.

He is responsible for the maintenance of the tracks, for the proper discipline of the employees on the Division, and for the safe and economical movement of passenger and freight traffic, and for the maintenance of the service at the proper state of efficiency.

He transmits immediately to the Treasurer all moneys collected by him, accompanied by a statement showing what received for, a copy of which statement he sends to the Comptroller, and also one to the Real Estate Department covering rentals received from property. He reports to the General Manager on the 1st day of May of each year, and at such other times as may be required by him, the names, positions and duties, and locations of each head of a sub-department on his Division on said date, the compensation paid to such employees, whether by fixed salary or otherwise.

He is assisted by a Principal Assistant Engineer and a Superintendent of Motive Power, and aided by a corps of Superintendents.

PRINCIPAL ASSISTANT ENGINEERS.

The Principal Assistant Engineers assist the General Superintendents in all matters pertaining to maintenance of way, and perform such other duties as may be assigned to them by the General Superintendents.

SUPERINTENDENTS OF MOTIVE POWER.

The Superintendents of Motive Power have charge of all the machine and car shops, and of the maintenance and repair of the locomotives, cars, floating equipment, tools and machinery on their

respective Divisions. They are assisted at each machine shop by a Master Mechanic, and at each car shop by a Foreman of Car Repairs, with whom they communicate directly as to all matters relating to the mechanical execution of the work; but all orders referring to the discipline of the shops, the increase or decrease of force or changes in the rates of wages must be transmitted through the Division Superintendents.

DIVISION SUPERINTENDENTS.

The Division Superintendents exercise on their Divisions all the powers of the General Superintendents which may be necessary for the proper management of their Divisions, and they, unless otherwise expressly provided, are responsible to their respective General Superintendents for the maintenance of the track, bridges and buildings, and the safe movements of trains.

ASSISTANT ENGINEERS.

When an Assistant Engineer is assigned to a Division he has special charge of the maintenance of roadbed, culverts, bridges, track and buildings, and all other matters pertaining to maintenance of way, acts under the direction of the Superintendent, and is responsible to him for the performance of his duties.

GENERAL AGENTS.

The General Agents located in the more important cities have the commercial interests and facilities under their immediate charge and look after the general interests of the Company in their locality.

GENERAL MANAGER.

Joseph Baldwin Hutchinson, General Manager, was born in Bristol, Pa., on Wednesday, March 20, 1844, and after a preparatory education entered the Polytechnic College of Pennsylvania, graduating in 1861. Upon his graduation, in order to perfect himself more thoroughly in the knowledge of machinery and applied mechanics, he entered the Delamater Iron Works in the City of New York in the spring of 1862, and continued there until the fall of that year,



J. B. HUTCHINSON



MICHAEL TRUMP



F. D. CASANAVE



JOSEPH T. RICHARDS

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when he passed an examination by the Board of Inspectors in New York City and received a certificate as Third Assistant Engineer. He at once entered the service of Hargous & Co. as Third Assistant Engineer on one of their steamers plying between New York and Habana, where he continued until the steamer was sold to the United States Government, in the early part of 1863. In June, 1863, he entered the service of the Pennsylvania Railroad Company as rodman in the Construction Corps on Mifflin and Centre County Railroad. Within two weeks thereafter he left to volunteer in the army, served throughout the Gettysburg campaign, and was honorably discharged in September, 1863, whereupon he re-entered the railroad service as rodman in the Construction Corps on the Western Pennsylvania Railroad. In August, 1864, he was promoted to be Assistant Engineer of that road, and in May, 1865, to be its Assistant Engineer, Maintenance of Way and Construction. March, 1868, he was transferred to the Columbia and Port Deposit Road as Assistant Engineer and remained there until January, 1869, when he took charge as Assistant Engineer on the Butler Extension. In March, 1869, he returned to the Columbia and Port Deposit Road as Assistant Engineer in charge of that road and the Columbia Bridge. In July, 1870, he was promoted to be Principal Assistant Engineer of the Columbia and Port Deposit Road, serving in that capacity until July 1, 1877, when he was promoted to be Assistant Superintendent of that road. He was promoted on January 1, 1879, to Superintendent of the Lewistown Division; July 1, 1881, to Superintendent Frederick Division; December 8, 1884, to Superintendent Altoona Division; January 1, 1890, to Superintendent Western Pennsylvania Division; January 1, 1891, to Superintendent of Maryland Division of the Philadelphia, Wilmington and Baltimore Railroad, the Baltimore and Potomac Railroad, and the Washington Southern Railway. On the 1st of March, 1893, he was promoted to General Superintendent of Transportation, and on February 10, 1897, to General Manager.

Mr. Hutchinson is qualified in every particular for the very responsible and important position he occupies. His familiarity with the needs of the communities through which the line passes, his abilities in the mastery of details, his unwearying capacity for work,

his gentle speech and kindly manners, are some of the qualities which tend to make successful his management of the office.

F. D. Casanave, General Superintendent of Motive Power, was born in France in 1843. After receiving his education at a private school he entered the service of the Pennsylvania Railroad Company as apprentice at the Altoona shops in 1862. After serving the full time of apprenticeship he spent about ten years in the Drawing Office at Altoona. Was Assistant Master Mechanic, Altoona shops, from 1876 to 1881; Master Mechanic, Fort Wayne shops, Pennsylvania Company, from 1881 to November, 1887; Superintendent of Motive Power, Pennsylvania Company, from November, 1887, to March, 1893, since which time he has been General Superintendent of Motive Power, Pennsylvania Railroad Company.

Michael Trump, General Superintendent of Transportation, was born in Philadelphia March 14, 1854, and received his preparatory education in the Friends' High School, located at Fifteenth and Race streets, in that city. After leaving the High School he entered the Polytechnic College of Pennsylvania, from which he graduated as a civil engineer in June, 1874. Upon graduation he entered the service of the city in the District Surveyor's office at Germantown, and continued therein until the spring of 1875, when he entered the location corps of the Philadelphia and Reading Railroad Company at Pottstown. In the spring of 1876 he entered the service of Wilson Bros. & Co.; in February, 1877, was appointed Assistant Resident Engineer of the Central Pacific Railroad, in charge of the Sacramento and Truckee Divisions; returning to Philadelphia in the spring of 1879, he re-entered the service of Wilson Bros. & Co. in the Bridge Department. In July, 1880, he entered the service of the Pennsylvania Railroad Company, and was assigned to special duty on the Pittsburgh, Virginia and Charleston Railway. In August, 1880, he was transferred for duty in the office of the Assistant Engineer, Pittsburgh Division. April, 1881, he was appointed Assistant Supervisor of Division 10, headquarters at Brinton Station; on the 1st of August in the same year was made Assistant Supervisor and Assistant Trainmaster on Southwest Pennsylvania Railway, and one month later, September 1st, he was appointed Assistant Engineer of the West Pennsylvania

Railroad Division, at Blairsville. On October 1, 1882, he was transferred to the Pittsburgh Division as its Assistant Engineer, and October 1, 1883, was appointed its Assistant Superintendent. February 17, 1897, he was appointed General Superintendent of Transportation.

Joseph Thomas Richards, Engineer Maintenance of Way, was born near Rising Sun, Cecil County, Maryland, February 12, 1845, and is a descendant of Joseph Richards, who, with other Friends from the village of Newgate, in the parish of Witnew and the County of Oxford, England, near the headwaters of the Thames, came to America in 1682 and settled close to Chester, Pa. His ancestors were evidently of Welsh descent, and through every generation since their settlement on these shores have been farmers. The last four generations, however, combined surveying with farming, and he has had the unusual experience of retracing some of the lines of work of his great-grandfather.

He was educated largely at the West Nottingham Academy, in Cecil County, Maryland, under the direction of the Rev. S. A. Gayley, with George R. Bechtel, a Princeton graduate, as Principal. After passing through that sterling Presbyterian institution with the highest honors for mathematics, the only other preparation for his railroad career was a short special course in Philadelphia. Since that time he has had large experience in almost every branch of Civil Engineering connected with the location, construction and operating of a railroad; of docks, wharves and buildings; of terminal, passenger and freight yards. For many years he has been the Designing and Constructing Engineer for the International Steamship Company for their piers at Jersey City, and the recent steel buildings for the American Line in New York City. He has had valuable experience as Mining Engineer in the service of the Cambria Iron Company at Johnstown, Pa., during 1873-74. Through his policy the surveys and ventilation of the mines were enabled to be continued during a bitter strike. The striking miners, who were in possession, yielding to his persuasive arguments, made an exception of the engineers and permitted them to enter the mines. They were the only employees of the Company to whom that concession was made.

He entered the service of the Pennsylvania Railroad Company in August, 1869, as rodman and transitman during the construction of new shops at Altoona. On June 1, 1870, he was appointed as Supervisor from Harrisburg to Newport, in which position he continued until October 16, 1871, when he accepted the position of Chief Engineer in locating and constructing minor railroads in Maryland. March 1, 1873, he became Chief of Locating Engineers for several surveys over the Allegheny Mountains for an outlet for the Bedford and Bridgeport Railroad. Two of these surveys to reach the main line were westward; one connected at South Fork Station, the other led to Johnstown via Somerset, whilst the third was northward via Hollidaysburg and the Altoona Division. On May 25, 1874, owing to the general business depression, surveys were stopped, and he accepted a position with the Cambria Iron Company. He returned to the service of the Pennsylvania Railroad Company on March 1, 1875, as Supervisor of Division No. 6, extending from Newport to Granville, from whence, on March 20, 1876, he was promoted to be Assistant Engineer, Maintenance of Way, on the Pennsylvania Railroad Division. From June, 1877, to March, 1883, he was Principal Assistant Engineer of the United Railroads of New Jersey Division, and from March, 1883, to June 24, 1885, Assistant to the Chief Engineer. On the latter date he was appointed by the President as Assistant Chief Engineer. On the 1st of March, 1893, when a change was made in the organization, he was appointed to his present position.

Mr. Richards has done individual emergency work. The rebuilding of the New Brunswick Bridge, which was destroyed by fire on the early morning of March 9, 1878, when 916 feet of temporary trestle, 40 feet high, was constructed over the Raritan River in 127 hours—during the blizzard of 1888, which blocked the New York Division for a week, and the terrible floods in Pennsylvania in 1889, which carried great destruction with them in the valleys of the Susquehanna, Juniata and Conemaugh—his professional skill and unwearyed exertions left their imprint upon the history of notable reconstructive events on the Pennsylvania Railroad. With the receding of the waters in 1889, and the opening of the temporary line



WILLIAM J. LATTI



F. L. SHEPPARD



ARTHUR HALE



R. M. PATTERSON

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for traffic, he was the officer from the General Office left in the field for two and one-half months in charge of permanent construction.

Mr. Richards is a forcible writer and pleasant speaker. His address on November 21, 1891, upon the occasion of unveiling the monument erected under his supervision by the Pennsylvania Railroad Company to mark the first piece of track laid between New York and Philadelphia, and his illustrated lecture upon the recouping of the line after the Johnstown flood, bear testimony to the versatility of his abilities. A man of the highest moral character, cautious, judicious and prudent, with keen cognitive powers, his actions are all prompt and intelligent, displaying good judgment. Self-reliant and persistent, he is never found unprepared for any call. Kindness, pity, reverence and love of humanity are very active virtues with him, and lead him to do many charitable deeds of which the world is not made cognizant.

Arthur Hale, Superintendent of Telegraph, was born in Boston on August 22, 1859. He is the son of the Rev. Edward Everett Hale, D.D., of that city, and the grandson of the Hon. Nathan Hale, LL.D., the builder and first President of the Boston and Worcester Railroad, now included in the system of the Boston and Albany Railroad. His grandfather was the nephew of Captain Nathan Hale of the Revolutionary War. His father's uncle was Edward Everett.

Mr. Hale's mother is Emily Baldwin Perkins, the daughter of the Hon. Thomas Clapp Perkins, of Hartford, Conn., and the niece of Henry Ward Beecher and Mrs. Harriet Beecher Stowe.

Mr. Hale graduated at Harvard College in 1880 with honors in mathematics. He worked for a short time with the Merrimack Manufacturing Company of Lowell, Mass., and in the Locomotive Department of the Mason Machine Works, at Taunton, Mass., and entered the service of the Pennsylvania Railroad October 16, 1882, as an apprentice in Altoona shops. After service in the shops, the draughting room, and in the Department of Tests, he was transferred to the Transportation Department in May, 1885, as shorthand clerk to S. M. Prevost, the first General Superintendent of Transportation. He acted as Chief Clerk of the Car Record Office

for two months from May 1, 1887, during the severe illness of the Chief Clerk, J. A. Keesbury, and was made Assistant Chief Clerk on July 1, 1887. On the resignation of Mr. Keesbury he was made Chief Clerk of the Car Record Office, and when Mr. R. M. Patterson was promoted to the Superintendency of the D. E. and K. Division, Mr. Hale succeeded him as Special Agent of the General Superintendent of Transportation. On January 1, 1898, he was appointed Superintendent of Telegraph.

Mr. Hale brings to his new duties a mind well stored with knowledge adapted to the requirements of the position and an invaluable railroad experience. He is a man devoid of prejudice, indefatigable in the pursuit of success, and one to whom the duties of life are assumed as a labor of love.

William J. Latta, General Agent at Philadelphia for the Pennsylvania Railroad Company, is the son of Dr. William Sutton Latta, and grandson of Rev. James Latta, and was born in Sadsbury Township, Chester County, Pa., near the Octoraro Church, on the 21st of November, 1852. He early learned telegraphy, and entered the service of the Pennsylvania Railroad Company as night operator at Parkesburg in November, 1869, serving there and in the telegraph offices on the Philadelphia Division at Paoli, Leaman Place, Mantua, Harrisburg and Philadelphia Yards until 1873, when he entered the telegraph office of the Division Superintendent at West Philadelphia. On January 1, 1875, he entered the General Agent's office as stenographer to Mr. Charles E. Pugh. On the opening of the Centennial Station in 1876 he was appointed Chief Clerk in charge of that office, and remained there until after the close of the fair. In 1878 he was promoted to be Superintendent of the grain elevator, and on the 1st of January, 1881, to be Superintendent of Altoona Division. On the 1st of October, 1882, he was made Superintendent of the Philadelphia Division, and on July 1, 1883, General Agent at Philadelphia.

Among the many corporations with whose interests he is identified is the Junction Railroad, of which he is Superintendent, having been appointed February 1, 1889, to succeed William F. Lockard, deceased.

Mr. Latta is also Trustee of the Tabernacle Presbyterian Church

of West Philadelphia, and Chairman of the Pennsylvania Railroad Department of the Young Men's Christian Association, West Philadelphia.

Inheriting in a high degree the obdurate, uncompromising integrity of the Scotch, that strong race from whence he sprung, and the sound religious beliefs that his forefathers taught, he has kept his mind clear, his heart pure and hands clean, notwithstanding the high position he occupies has constantly been environed by allurements and temptations to which a weaker man would in all probability have fallen a victim.

His course of conduct, impulses, sensations and mental impressions are largely determined by his ardent nature. He is steady in his mental surveys and singularly free from intolerance and prejudice. His propensity is always to be considerate in his treatment of others, and to entertain respect for their opinions. He is courageous, swift to attack, heroic in defense, and fights his cause to a successful issue; but success only makes him magnanimous. Bland and delightful in his personal relations and full of sympathy, the friendships he forms are paramount and strong, and he seems to derive exquisite pleasure in promoting some one's welfare. He endears himself to his subordinates by his extreme tenderness and heartfelt care for their interests. His benevolence ripples all over with kindness and causes him to rejoice with the joyousness of others. Master of a high order of intelligence, and uniting within himself great energy, strength of character, rapid perception, clear judgment and entire uprightness to a studious temperament and methodical habits, he has become possessed of such a fund of knowledge and such a control of facts that he dispatches with the greatest of ease the multitudinous and complex questions which are being constantly presented to him. This renders him a safe and sagacious counsellor, and places him in the lead whenever the interests of business or other affairs of life are being considered.

Robert M. Patterson, Superintendent of the Delaware Extension and Kensington Division, was born in Philadelphia in 1851, and was educated at the University of Pennsylvania. In 1870 he became connected with the Engineer Corps of the Northern Pacific Railroad until 1873, when he entered the service of the Pennsylva-

nia, serving as Assistant Trainmaster, Assistant Supervisor and Assistant Engineer until 1878, when he removed to Virginia. He engaged in engineering and business pursuits in that State until 1882, at which time he engaged with the Buffalo, New York and Philadelphia Railroad and allied lines as Division Superintendent. In 1885 he returned to the Pennsylvania Railroad Company, entering the office of the General Superintendent of Transportation as Special Agent, which position he continued to hold until May 1, 1893, when he was promoted to his present position.

Frank Little Sheppard, General Superintendent of the Pennsylvania Railroad Division, was born in Bridgeton, N. J., in 1851, and when seventeen years old entered the service of the Pennsylvania Railroad as an apprentice at the Altoona machine shops. Soon after the lease of the United Railroads of New Jersey to the Pennsylvania Railroad he was transferred to that Division, serving in various capacities, principally as Trainmaster, on the New York Division until 1881, when he was appointed Superintendent of the Sunbury Division, P. and E. R. R. He continued in that position but a short time, when in 1882 he was appointed Superintendent of Motive Power at Altoona, serving as such until 1890, when at twenty-nine years of age he was promoted to his present position.

Walter W. Atterbury, Superintendent of Motive Power, has charge of all machine and car shops on the Division, of the maintenance and repairs of cars, tools and machinery, and is assisted at each machine shop by a master mechanic and at each car shop by a foreman of car repairs. He has general oversight as to the discipline of shops, the regulation of the number of men employed, rates of wages, etc. He was born at New Albany, Ind., January 31, 1866. After a liberal education he was graduated from Yale University. He entered the railroad service in 1886 as an apprentice in the Altoona shops, since which time he has been consecutively engaged as Assistant Road Foreman of Engines on various divisions of the Pennsylvania Railroad from 1889 to 1892. In 1893 he was promoted to be Assistant Engineer of Motive Power in the Pennsylvania Company's Northwest System, and, in 1893, to be Master Mechanic for the Pennsylvania Company at Fort Wayne, Ind. On October 26, 1896, he was advanced to be Superintendent



M. W. THOMSON



W. W. ATTERBURY



ANTES SNYDER



J. P. LEVAN

of Motive Power of the Pennsylvania Railroad Division, vice J. M. Wallis, promoted. Mr. Atterbury, although a young man, is well equipped with scientific, technical and practical knowledge, and well qualified to advance the standards of his department. He is a member of the American Society of Mechanical Engineers.

McLeod W. Thomson, Principal Assistant Engineer, has a general supervision over maintenance of way matters, real estate, leases, and such other details as may be assigned to his Department by the General Superintendent. He is a native of Franklin County, Pennsylvania, and was educated at Princeton College and the School of Mines of Columbia College. After considerable experience on the United States Coast Survey, as also in the construction and operation of steel works, he entered the service of the Pennsylvania Railroad Company in March, 1880. He was engaged in locating new lines until June, 1881, when he was transferred to Altoona, and on August 1, 1883, was appointed Engineer Maintenance of Way of the Pennsylvania Railroad Division.

In addition to the pre-going officers of the Division there are five men whose long, faithful and intelligent service has done so much to elevate the standard of the Pennsylvania Railroad's mechanical department and to gain for it a world-wide celebrity that we present herewith their portraits and briefs of career:

George Wooley Strattan is of Quaker parentage and a native of Philadelphia, Pennsylvania. He was born in January, 1836, and began work in Altoona machine shops March 14, 1861, where he continued until January 28, 1863, when he removed to Freedom, in the Kishacoquillas Valley, three miles out from Lewistown, Pennsylvania, taking employment with the Freedom Iron Company, which at that time was making locomotive tires from charcoal blooms, which were considered the best tires in the market. He remained at Freedom until September 22, 1864, when he returned to Altoona, taking a position as machinist in the erecting shop, and was made a gang foreman in February, 1865; promoted to be Assistant to the Master Mechanic March 23, 1867, and appointed Master Mechanic October 1, 1871, which position he still fills.

He acquired a knowledge of machine work in the mechanical tool works of William Sellers & Company, Philadelphia.

John P. Levan, General Foreman Pennsylvania Railroad Car Shops, Altoona, and the first person apprenticed to a trade by the Pennsylvania Railroad Company, was born at Lebanon, Pennsylvania, on November 17, 1834, but removed to Harrisburg when four years of age. He began his service with the Pennsylvania Railroad Company November 1, 1851, and was indentured to the car building trade November 17, 1851. He served as an apprentice to November 17, 1855—one year at Harrisburg shop and three years at Altoona shop; then worked as car builder at Altoona shop to April 1, 1861, when he was made Assistant Foreman, serving until August 1, 1861, at which time he was promoted to General Foreman Altoona Car Shops, which position he holds at the present time.

When Mr. Levan was appointed General Foreman there were 96 men employed in the car shops under his direction; now there are 2064 men employed there.

Andrew Kipple, Foreman Freight Shop, Altoona Car Shops, was born June 20, 1830, and entered the service of the Pennsylvania Railroad Company at Altoona, as car builder, July 14, 1851. He was appointed Gang Foreman in Freight Shop September 1, 1853, and Foreman of Freight Shop, Altoona Car Shops, September 28, 1857, which position he holds to date.

ENGINEER RIGHT OF WAY.

Antes Snyder, Engineer Right of Way, Pennsylvania Railroad Division, Pennsylvania Railroad, whose office is at Blairsville, was born December 9, 1836, in Selinsgrove, at that time in Union County, Pennsylvania, but now in Snyder County, which latter county was formed out of a part of Union County in 1855, and named after Simon Snyder, his grandfather, who was Governor of Pennsylvania for three terms—from 1808 to 1817. Mr. Snyder spent his early life in Pottstown, Montgomery County, Pa., with his uncle of the same name, a graduate of the U. S. Military Academy at West Point, who was stationed at that place and employed upon the Philadelphia and Reading Railroad. He commenced his life as an Engineer with his uncle upon the Philadelphia and Reading Railroad, and while there was engaged with him in superintending



G. W. STRATTAN



ANDREW KEPPEL



W. HEYWARD MYERS



THOMAS GUCKER

the construction of a number of stone arch bridges and viaducts. These bridges and viaducts were constructed to take the place of wooden lattice bridges. Among the more prominent of these structures may be mentioned the skew arch viaduct upon the Richmond branch of that road crossing the Schuylkill River at the Falls of Schuylkill, and the arch viaduct on the main line crossing the Schuylkill River and canal at Peacock Locks, some eight miles above the City of Reading.

He was next engaged under Mr. George B. Roberts, Chief Engineer in the location and construction of the Mahanoy and Broad Mountain Railroad in Schuylkill County, Pa. This road was built to reach the various anthracite collieries in the Schuylkill coal region, and was in the interest of the Philadelphia and Reading Railroad Company. Before the construction of this branch the Company depended on the Mine Hill and Schuylkill Haven Railroad for its coal traffic. About the time of completion of the Mahanoy and Broad Mountain Railroad, Mr. Snyder was sent by Mr. Roberts to take charge of the location and construction of the Cape May and Millville Railroad in New Jersey. This road was promoted by the Camden and Amboy Railroad Company, and when completed formed the last link in the all-rail line from Camden to Cape May. Shortly before the completion of the Cape May and Millville Railroad in 1863, he was sent by Mr. Roberts to Blairsville, Pa., to complete the Western Pennsylvania Railroad. This road was built upon the partially constructed line of the North Western Railroad between Blairsville and Freeport, with a branch line from Freeport along the bed of the old Pennsylvania Canal to Allegheny City, and another branch subsequently constructed from Freeport to Butler, in Butler County, Pa.

Mr. Snyder has been in the service of the Pennsylvania Railroad Company since 1863, with the exception of about three years, during which he was engaged in the lumber business in Freeport and Pittsburgh, and since the completion of the Western Pennsylvania Railroad has been engaged principally in the Real Estate and Right of Way Departments of the Pennsylvania Railroad Company.

Mr. Snyder has probably a more complete knowledge of the

records of the old Pennsylvania Canal and Portage Railroads than any other person. It covers a study of all the laws under which the Public Works were constructed, the details as to the cost thereof, and the litigation attending the acquisition of the right of way and real estate for same. His subsequent experience in connection with the rights of the Pennsylvania Railroad Company through its purchase from the State of the said Public Works has been invaluable to the Company, and always appreciated by its management.

Thomas Gucker, Superintendent of the Philadelphia Division, was born at Williamsport, Pennsylvania, April 1, 1844, and educated in the schools of that city. On the 1st of January, 1862, he entered the service of the Philadelphia and Erie Railroad Company as messenger in the Superintendent's office of the Eastern Division of that road. He was promoted to a clerkship in that office, and continued as such until June, 1864, when he was raised to the position of Superintendent's clerk, which he held for nearly nine years. From March 1, 1873, to August 1, 1883, he was Superintendent Eastern Division, Philadelphia and Erie Railroad, and Lewistown and Tyrone Railroad. From March 1, 1873, to August 1, 1873, he was also Superintendent of the Danville, Hazleton and Wilkesbarre Railroad, and from August 1, 1873, to August 1, 1883, also Superintendent of the Susquehanna Division of the Northern Central Railway Company. On the 1st of August, 1883, he was appointed to be Superintendent of the Philadelphia Division, a position he has filled with ability.

S. P. Hutchinson, Assistant Engineer Philadelphia Division, was born on April 27, 1861, at Philadelphia, Pa. He was educated at St. Paul's School, Concord, N. H., and the University of Pennsylvania. He entered the service of the Pennsylvania Railroad Company as rodman on the Assistant Engineer Corps of the Philadelphia Division, November 1, 1881, transferred to Altoona office, February 19, 1883; was rodman on construction, change of line, West Pennsylvania Division, from June 12, 1883, to October 1, 1883; returned to Altoona office, October 1, 1883, and remained until January, 1884. From January, 1884, to November 1, 1885, was rodman and Assistant Engineer, location and con-

struction Pennsylvania Schuylkill Valley Railroad; November 1, 1885, to February, 1886, Altoona office; February, 1886, to October 19, 1886, interlocking and signal work New York and Pittsburgh Divisions; October 19, 1886, to October 1, 1888, Assistant Supervisor, Harrisburg; October 1, 1888, to February 9, 1891, Supervisor at Norristown. From February 9, 1891, to January 5, 1894, Supervisor, West Philadelphia; January 5, 1894, until the present time, Assistant Engineer Philadelphia Division. During the time he was Supervisor at West Philadelphia the tunnels at Thirty-sixth street and Thirtieth street and the changes at the Broad Street Station were made, and as Supervisor he had charge of the maintenance of way portion of those pieces of work.

W. Heyward Myers, Superintendent of the Schuylkill Division, was born in San Antonio, Texas, April 9, 1856. Mr. Myers was educated in private schools and at the School of Mines of Freiberg, Germany. He entered the service of the Pennsylvania Railroad Company, January 17, 1876, as rodman in the office of the General Superintendent at Altoona; was appointed Assistant Supervisor at Downingtown in June, 1876; Supervisor at Lancaster in April, 1879; Assistant Engineer of the Tyrone Division in January, 1881; Assistant Engineer of the Middle Division in September, 1881; Assistant Engineer of the Philadelphia Division, January 1, 1884; Superintendent of the Bedford Division, April 1, 1889; Superintendent of the Belvidere Division September 1, 1889; and Superintendent of the Schuylkill Division January 1, 1891. He is a modest man of decided ability and unblemished character, and a very successful railroad manager of the rising class.

A. W. Moss, Superintendent of the Frederick Division, was born in Philadelphia May 4, 1859, and was a son of John and Emily Nixon Moss, and great grandson of Robert Morris. He attended school at Germantown Academy until the death of his parents. He then went to a boarding school at Ury House, Fox Chase, Pa., and finished his education at Phillips' Scientific School, Andover, Mass.

On December 7, 1877, he entered the machine shops at Altoona as an apprentice. After going through the several shops, test department and drawing-room, he was appointed Assistant Road

Foreman of Engines of the New York Division June 1, 1882, in which position he remained until March 20, 1884, when he was promoted to Assistant Freight Trainmaster of same Division; appointed Passenger Trainmaster December 1, 1885, holding that position until July 1, 1890, when he was appointed Superintendent Lewistown Division, serving in that capacity until January 1, 1893, when he was promoted to be Superintendent Frederick Division, which position he still holds.

George W. Creighton, Superintendent of the Middle Division, Pennsylvania Railroad, was born in Philadelphia June 22, 1856, and received his education principally in the public schools of that city, being graduated from the Central High School. Refusing to accept a collegiate course, his subsequent education was acquired by close application and long years' use of the midnight oil at home. On January 2, 1878, he became connected with the "Collins Expedition," and served with the Madeira and Mamore Railway in the province of Matto Grosso, Brazil, as chairman, rodman, levelman, transitman, topographer and Acting Principal Assistant Engineer. His resignation from that service took effect September 26, 1879, and on the 1st of October in the same year he entered the employ of the Pennsylvania Railroad Company as rodman in the Engineer Corps in charge of Camille S. d'Invilliers. This corps made surveys from Frederick Road Station, on the Baltimore and Potomac Railroad, to Ellicott City through Catonsville, to which point a road has since been built. Later the corps was located at Saltsburg, on the Western Pennsylvania Railroad, and made surveys for the relocation of that road from Lockport, on the Pittsburgh Division of the Pennsylvania Railroad, to the Allegheny River; upon lines so located the road was reconstructed. Subsequently the corps made the preliminary surveys of the present Cornwall and Lebanon Railroad.

On May 1, 1880, Mr. Creighton was appointed Assistant Supervisor at Baltimore, his duties covering part of the Baltimore and Potomac Railroad as well as the Northern Central Railway. On the 1st of January, 1881, he was appointed Supervisor of Baltimore Section, which covered the City of Baltimore on both roads. His other promotions were as follows: May 1, 1883, appointed as As-



S. P. HUTCHINSON



A. W. MOSS



G. W. CREIGHTON



G. B. BEALE

sistant Engineer Shamokin Division, Northern Central Railway, and Sunbury Division, Philadelphia and Erie Railroad; November 1, 1885, Assistant Engineer of West Jersey and Camden and Atlantic Railroads; May 1, 1889, Assistant Engineer Philadelphia Division; January 1, 1891, Superintendent Bedford Division; February 1, 1891, Superintendent Shamokin and Sunbury Divisions; and October 1, 1895, Superintendent Middle Division, Pennsylvania Railroad.

George B. Beale, Assistant Engineer Middle Division, Pennsylvania Railroad, was born in the City of Philadelphia, May 27, 1861; educated in the University of Pennsylvania, from which institution he was graduated June 15, 1881. He was appointed rodman September, 1881, and employed on the extension of the second track of the Baltimore and Potomac Railroad until November of the following year, when he was promoted to levelman and transitman on the Philadelphia, Germantown and Chestnut Hill Railroad, in which capacity he served until July, 1883, at which time he resigned. He again entered the service as rodman in February, 1884, on the Pittsburgh Division of the Pennsylvania Railroad, continuing in that position until February, 1886, when he was transferred to the office of the Assistant Engineer of the New York Division, at Jersey City, and placed in charge of the Engineer Corps of that Division March 10, 1888. Appointed Assistant Supervisor Subdivision "A," New York Division, November 1, 1889, and promoted to Supervisor of the same Division May 1, 1890. Appointed Assistant Engineer Middle Division Philadelphia and Erie Railroad, December 17, 1894, and transferred to Assistant Engineer, Middle Division, Pennsylvania Railroad, October 1, 1895, which position he at present holds.

Victor Wierman, Superintendent of the Lewistown Division, was born at Towanda, Bradford County, Pa., on the 20th of December, 1855. He was educated at Lafayette College, Easton, Pa., graduating in June, 1876. From then until November, 1878, he was principally employed as transitman, Pennsylvania Canal Company, on right of way and topographical surveys; also, for a short period, on topographical work for the Pennsylvania State Geological Survey and the Lehigh Valley Railroad Company, and in work-

ing up the right of way records in the Auditor-General's office at Harrisburg. He entered the service of the Pennsylvania Railroad Company on November 14, 1878, as Assistant Supervisor New York Division, Subdivision "B." In May, 1882, he was appointed Supervisor on the same Division, and in December, 1884, was appointed Assistant Engineer West Penn Division. In January, 1886, transferred to the Pittsburgh Division as Assistant Engineer. October, 1894, was promoted to be Superintendent Bedford Division, and on October 1, 1895, transferred to the Superintendency of the Lewistown Division.

Frank P. Abercrombie, Superintendent of Bedford Division, was born at Fort Towson, Indian Territory, on January 2, 1852. He received his education at St. Mark's School, Southboro, Mass., and Rensselaer Polytechnic Institute, Troy, N. Y. After being graduated from the latter institution he served as Second Assistant Engineer in Government survey of the Youghiogheny River in 1873. In 1874 he entered the service of the Pennsylvania Railroad Company in the Engineer's office at Altoona, Pa., from whence, in 1875, he was promoted to be Assistant Supervisor Division No. 6, New York. Since that time his promotions have been: Supervisor, Baltimore and Potomac Railroad, 1876; Supervisor, West Jersey and Atlantic, 1880; Assistant Engineer West Jersey Railroad, 1881; Assistant Engineer, Sunbury Division, Philadelphia and Erie Railroad, 1885; Assistant Engineer, Eastern Division, Philadelphia and Erie Railroad, and Susquehanna Division, Northern Central Railway, 1891; and on December 10, 1896, promoted to be Superintendent of Bedford Division.

Samuel S. Blair, Superintendent Tyrone Division, was born in Susquehanna Township, Dauphin County, Pa., October 9, 1833. Leaving his father's farm and serving for a time on the canal, he entered active business life in Pittsburgh, in 1851, as mercantile clerk for Keer, Jones & Co. On June 11, 1853, he entered the service of the Pennsylvania Railroad. He was transferred to the Adams Express Company as messenger between Harrisburg and Baltimore, September, 1853, but returned to the Pennsylvania Railroad in March, 1854, and served as assistant freight conductor. Was promoted to freight conductor soon after, in which capacity



VICTOR WEIRMAN



F. P. ABERCROMBIE



S. S. BLAIR



C. P. McARTHUR

he served until January 1, 1860, when he was appointed agent at Bolton Station, Baltimore, Northern Central Railway. Appointed Trainmaster same year, and for ten months, while in that position, ran passenger train. Appointed Superintendent Baltimore Division in June, 1863, serving until November 1, 1873, when he was transferred to Tyrone Division as its Superintendent.

Mr. Blair's service has been long, important and honorable. During the war, whilst on the Northern Central Railway, the most important line of rail communication to and from the national capital, he displayed courage, integrity, capacity and untiring energy in handling new and difficult propositions in transportation which were constantly arising.

The success of the moving by rail of large bodies of troops and munitions of war, under regular calls or during urgent emergencies, was largely due to his management. When the war was over the same was true of him in handling the trade of a seaport city, and afterwards in developing the coal, iron, agricultural and manufacturing interests in the centre of a great Commonwealth.

The Assistant Engineer of the Tyrone Division is Charles Prevost McArthur, who was born in Philadelphia on August 23, 1860, and completed his education at the University of Pennsylvania, from which he graduated in the class of 1882. He entered the service of the Pennsylvania Railroad Company, May 10, 1882, as rodman in construction of the low grade of the West Penn Division, and worked on preliminary location, construction, canal, right-of-way and signals on the Pennsylvania Railroad Division generally. Was also assistant to the Assistant Engineer at Blairsville and Pittsburgh. His later appointments and occupations were as follows: October 20, 1886, Assistant Supervisor, No. 7, Huntingdon; September 5, 1887, Assistant Supervisor, No. 13, Pittsburgh; July 24, 1888, Assistant Supervisor, No. 2, Wilmington, Del.; November 1, 1889, Supervisor, No. 26, Columbia; January 1, 1893, Supervisor, No. 4, Middletown; Winner second General Manager prize, Inspection, 1893; Winner first General Manager prize, Inspection, 1894; December 1, 1894, Assistant Engineer, Tyrone Division, Tyrone.

Almet E. Reed, Superintendent of the Altoona Division, was

born at Brooklyn, N. Y., October 15, 1855. Graduated from Brooklyn Polytechnic Institute, June, 1874. Entered the service of the Pennsylvania Railroad Company in Assistant Engineer's office at Altoona, March 5, 1875. Appointed Assistant Supervisor at Gallitzin, February 1, 1876. Transferred to same position at Hollidaysburg in June, 1877; at New Florence, January 1, 1880; at Lancaster, April 18, 1881. Appointed Supervisor at Middletown, June 1, 1881. Assistant Engineer at Tyrone, September 1, 1881; Assistant Engineer at Wilmington, Del., August 15, 1884; Superintendent of Lewistown Division, January 1, 1893; Superintendent of Shamokin and Sunbury Divisions, October 1, 1895, and Superintendent of the Altoona Division, December 10, 1896.

Frank Firth Robb, Superintendent, was born in Philadelphia, November 7, 1858. He was graduated from Polytechnic College of Pennsylvania in June, 1879, and entered the service of the Pennsylvania Railroad Company, November 1, 1879, as rodman in the office of the Principal Assistant Engineer at Altoona. Appointed Assistant Supervisor at Hollidaysburg, June 20, 1880. Transferred to same position on Division No. 8, at Spruce Creek, April 18, 1881. Appointed Supervisor Altoona Yard, October 1, 1882. Transferred to Monongahela City as Supervisor of the Monongahela Division, August 15, 1884. Appointed Assistant Engineer Monongahela Division, February 1, 1885, and successively transferred to the Schuylkill Division, the Eastern Division of the Philadelphia and Erie, and Susquehanna Division of the Northern Central, and the Middle Division of the Main Line, October 20, 1886, August 1, 1887, and February 1, 1891, respectively. Appointed Superintendent of the Bedford Division January 1, 1893, and transferred to present position October 8, 1894. Mr. Robb is one of the younger Superintendents, but has already won for himself the good opinion of his superiors, and is looked upon as one of those into whose hands greater responsibilities will be placed at no distant day.

Robert Pitcairn, General Agent, Pittsburgh, and Superintendent of the Pittsburgh Division, was born at Johnstone, Scotland, May 6, 1836, and came to the United States with his parents when but a mere lad. He began his business life by entering the telegraph office at Pittsburgh, in 1848, as a messenger boy. He soon learned



ALMET E. REED



ROBERT PITCAIRN



FRANK F. ROBB



R. L. O'DONNEL

telegraphy, and worked at it both at Pittsburgh, Pa., and Steubenville, Ohio, until July, 1853, when he entered the service of the Pennsylvania Railroad Company as telegraph operator and assistant ticket agent at "Mountain House," within one mile of Hollidaysburg, and when the road was opened, in February, 1854, went to Altoona as telegraph operator and clerk for Herman J. Lombaert, Superintendent. Whilst there he laid the foundation for the train rules and rules of discipline as they now exist, and inaugurated train-running by telegraph orders. Beginning as he did in an humble capacity, he forged ahead by industry, integrity, and the very closest application to duty. On August 1, 1860, he was appointed Superintendent of the Middle Division, then extending from Conemaugh to Mifflin, with the headquarters at Altoona. He occupied that position at the outbreak of the Civil War, and received great and proper credit for the prompt and intelligent manner he pushed forward troops and munitions of war. He was always equal to emergencies, as is instanced in the following :

Major Thomas W. Sherman, United States Army, with his battery in charge, was hastening forward to join the troops which were being concentrated at Cockeysville, under the orders of Major Fitz John Porter. Sherman was exceedingly anxious about ammunition for his battery, and was telegraphing ahead in regard to it. When he reached Altoona Mr. Pitcairn met him and told him of the arrangements being made to forward the battery and supply the ammunition. Mr. Pitcairn at this time was exceedingly boyish-looking, and Major Sherman would not open up communication with him on that account. William Hasell Wilson, Chief Engineer of the Road, was at Altoona. Mr. Pitcairn sent for him, and through his mediumship discovered that Major Sherman had no ammunition at all for his battery, and wanted the authorities at Harrisburg to devise some means for supplying him. Mr. Pitcairn rushed the party off, and made report to Thomas A. Scott, who was then at Harrisburg, as follows :

"ALTOONA, April 21, 1861.

"T. A. SCOTT :

"The Sherman party off at 10.50. They will make a six-hour run to Harrisburg. They were delayed here on account of Major

Sherman wanting some information, and he would not say what it was. I told him the message he received was from T. A. S., the V. P. of the great Central, and that I could give him any information and had charge of the matter, but nothing would do but a military man, when a lucky thought of introducing Mr. Wilson as an Engineer fetched him, and he made known his wants. He left, much worried on account of the ammunition.

(Signed)

“R. P.”

At the time of the Antietam campaign, in September, 1862, the Cumberland Valley Railroad was called upon to do a large military business, both in troops and munitions of war. A great deal of confusion occurred, when Colonel Scott sent for Mr. Pitcairn, had him appointed a staff officer, and placed him in charge of the Cumberland Valley Railroad during the emergency. He handled the business there with much skill, and his whole record throughout the war is one of magnificent service. In 1862 he was appointed Superintendent of Transportation, and from then until April 1, 1865, he filled that position and had charge of various Divisions. On the latter date he was appointed Superintendent of the Pittsburgh Division, and on February 14, 1874, General Agent at Pittsburgh in conjunction with his Superintendency. This latter appointment placed him in direct contact with the great commercial interests of the Company at the forks of the Ohio, and made him the medium of communication with all connecting lines at that point.

He has stamped the Pittsburgh Division with the stamp of his strong and original personality, and given it and the men employed upon it the impetus of his own force. He has grown up with the people and material interests of Western Pennsylvania, identifying himself with everybody and everything likely to advance the public good, and, like all men of strong attachments, allows no inducements to detach him from those people and interests. Promotions in title have ever been within the range of his acceptance, for no official is more highly regarded by the management of the Company than he, but he has persistently declined them, preferring to remain in his own country and among his own people. There are many points of view from which Mr. Pitcairn's portrait could be

painted, but the one which shows the best light is that which brings out his excellent judgment of men and their treatment. He is a true son of toil, conquering by industry and frugality, and to him must be attributed the splendid organization which has made the fame of the Pittsburgh Division world-wide.

He is supported by a strong staff, if not from the standpoint of numbers, most assuredly from that of ability, integrity and fidelity, and one of the striking features of his management is the frequent consultations he holds with his staff. Regularly once a week, and oftener when occasion requires it, he calls them together, listens to their reports and suggestions, hears their criticisms, and advises with them. No schedule is ever made and put into operation on the Division without first passing the ordeal of such consultation and criticism. This is practically a school of the railroad without an equal, that advises the Superintendent, broadens the staff and establishes a standard of excellence by which to measure all other Divisions.

Richard L. O'Donnel, Assistant Superintendent of the Pittsburgh Division, was born in Philadelphia November 5, 1860. He was graduated from the Philadelphia High School in 1877, and from Polytechnic College of Pennsylvania in 1882. He spent 1882 and 1883 as rodman in the construction of the Cornwall and Lebanon Railroad. In 1883 Mr. O'Donnel entered the service of the Pennsylvania Railroad Company, where in various offices and locations he has been continuously until the present time. Employed as a rodman, levelman and transitman in the construction department, 1883 and 1884; as draughtsman at Blairsville in the Assistant Engineer's office of the West Penn Division during 1884, 1885 and 1886, and from November, 1886, until March, 1887, as Assistant Engineer in the Principal Engineer's office at Altoona. He was appointed Assistant Supervisor on the Altoona Division at Hollidaysburg in March, 1887, in which position he continued until February, 1888, being then transferred to the same official post at Lancaster, on the Philadelphia Division. In August of 1889, after three weeks' of duty on the Pittsburgh Division at Johnstown, Mr. O'Donnel was transferred a second time as Assistant Supervisor to New Florence, from which position he was promoted in November, 1889, to

that of Supervisor in the Altoona Yard. In April, 1891, being promoted to the office of Assistant Engineer of the Tyrone Division, he continued at that point until December, 1894, when he was transferred to the Pittsburgh Division as Assistant Engineer, and on February 17, 1897, promoted to be its Assistant Superintendent.

Joseph B. Baker, Jr., Assistant Engineer Pittsburgh Division, was born at Gap, Lancaster County, Pa., August 31, 1855. He was educated at private schools and the Lehigh University. In July, 1883, he entered the service of the Philadelphia and Reading Railroad as rodman in the roadway department; July, 1884, to March, 1885, was rodman and Assistant Engineer, Pennsylvania Railroad, General Superintendent's office, Altoona; March, 1885, Assistant Supervisor, Lewistown Division; March, 1887, Assistant Supervisor, Mifflin, Middle Division; July, 1888, Assistant Supervisor, Philadelphia, Philadelphia, Wilmington and Baltimore Railroad Division; December, 1888, Assistant Supervisor, New Florence, Pittsburgh Division; February, 1889, Supervisor, Monongahela Division; June, 1889, to September, 1889, on special work, Johnstown and Conemaugh; December, 1889, Supervisor, Paoli, Philadelphia Division; October, 1895, Assistant Engineer, Middle Division, Philadelphia and Erie Railroad; February 17, 1897, Assistant Engineer, Pittsburgh Division.

D. H. Lovell, Superintendent of the Monongahela Division, was born at Duncansville, Blair County, Pa., on September 19, 1853, and when but a few months over ten years of age—January 1, 1864—he entered the service of the Pennsylvania Railroad Company as an "all around" boy in the station at that point. On the 1st of May, 1866, he was appointed messenger in the office of the Superintendent of Transportation at Altoona, and on the 1st of February, 1867, was promoted to a clerkship in the General Superintendent's Office, where he remained until September, 1870, when, feeling the necessity for further instruction and preparation for a railroad life he entered school, and remained there until March, 1873, when he re-entered the General Superintendent's Office as stenographer. He continued in that employment until 1875, when he entered college; after a collegiate course of three years he again took service with the Pennsylvania Railroad Company, entering the



J. B. BAKER, Jr.



D. M. LOVELL



A. G. MITCHELL



D. M. WATT

office of the Principal Assistant Engineer at Altoona on January 1, 1878. On January 28, 1879, he was made Assistant Supervisor Division No. 10, Pittsburgh Division; on December 20, 1879, transferred to same position in Altoona Yard, and on January 1, 1881, was promoted to be Supervisor at the latter point. On the 1st of October, 1882, he was assigned as Supervisor of Division No. 4, Philadelphia Division, and on April 1, 1883, raised to Assistant Engineer of Middle Division, Philadelphia and Erie Railroad, with headquarters at Renovo, from whence he moved to Harrisburg October 1, 1889, to become Assistant Engineer of the Middle Division Pennsylvania Railroad. He was promoted to be a Superintendent, and assigned to the Bedford Division February 1, 1891, to the Cambria and Clearfield Division January 1, 1893, and the Monongahela Division October 1, 1894.

Allen Gilmore Mitchell, Assistant Engineer Monongahela Division Pennsylvania Railroad, was born February 3, 1855, at Madison, Somerset County, Maine. His education was received in the public schools of his native State and at the Maine State College. In August, 1875, he received the degree of Civil Engineer, and has since been engaged in engineering business as follows:

August, 1875, to December, 1875, was rodman on the extension of the Somerset Railroad. December, 1875, to March, 1880, he was engaged in civil engineering land and surveying in Somerset County, Maine, with office at Madison. March, 1880, to January, 1881, was rodman Pennsylvania Railroad, location and construction of South West Pennsylvania Railroad branches. January, 1881, to December, 1881, was transitman on the Pennsylvania Railroad in charge of Topographical surveys of Blair, Centre and Clearfield Counties. December, 1881, to February, 1882, served as Assistant Engineer Pennsylvania Railroad on the same Topographical surveys. February, 1882, to February, 1884, was with H. C. Frick Coke Company, Scottdale, Pa., as Assistant Engineer in charge of civil and mining engineering work. February, 1884, to September, 1884, was located in office of Engineer Maintenance of Way, Altoona, Pa., as Assistant Engineer. From September, 1884, to February, 1885, was Assistant Supervisor Pennsylvania Railroad on the Middle Division from Huntingdon to Granville,

and from February, 1885, to January, 1886, Altoona to Huntingdon. Was Assistant Supervisor Philadelphia Yard from January, 1886, to November, 1887; Supervisor Monongahela Division, Pittsburgh to Monongahela City, from November, 1887, to December, 1888; Supervisor Pittsburgh, Division, Altoona to Conemaugh, December, 1888, to January, 1891. On January 1, 1891, he was promoted to be Assistant Engineer of the Monongahela Division with office at Pittsburgh, the position he is now occupying.

David Milne Watt, Superintendent of the Western Pennsylvania Division, was born in the City of Philadelphia, Pa., Washington's Birthday, Wednesday, February 22, 1843, of Scotch parentage, being second of four sons of James Cruikshank Watt and Jean Allen, who came from Aberdeen, Scotland. At the age of five years his parents removed to the City of Pittsburgh, Pa., where he has since resided, with the exception of the year 1860 and the early part of 1861, when he was in Philadelphia with the cloth house of McClintock, Grant & Co., at 333 Market street, as entry and bill clerk. On the death of his father, June 6, 1861, he severed his connection with the firm and assisted in the settlement of his father's estate. On October 1, 1861, he joined Company A, Fifth Regiment, Excelsior Brigade, under General Daniel E. Sickles, then at Washington, D. C., and was mustered into the United States service as a private. Was promoted to First Sergeant, Company I, same regiment, in November; as Second Lieutenant, in September, 1862; and later on as First Lieutenant; and commissioned as Captain in 1863. He resigned from the service in the latter part of March, 1864, and returned to Pittsburgh. On April 5, 1864, he entered the service of the Pennsylvania Railroad Company as Through Manifest Clerk at Duquesne Freight Station, then in charge of D. A. Stewart, as Agent. On July 19, 1864, was transferred as Chief Clerk, Pittsburgh Division, under Andrew Carnegie, Superintendent. When Mr. Robert Pitcairn succeeded to the Superintendency he continued with him as Chief Clerk and Private Secretary until December 12, 1881, when he was appointed Superintendent, Monongahela Division. October 9, 1894, he was transferred to his present position.

He is perfectly familiar with the interests of the Pennsylvania



J. W. NELSON



G. C. WILKINS



J. M. WALLIS



C. A. PRESTON

Railroad Company in the western part of the Commonwealth, having practically developed with them. His military record is highly honorable and creditable to him, and his army training has been of inestimable value in the establishing and maintaining of the splendid discipline on the Division.

John William Nelson was born in Fincastle, the county town of Botetourt County, Va., on Monday, January 1, 1855. His education was received in private schools and in the Virginia Military Institute, which he entered in 1869, and was graduated therefrom in 1873, with the degree of Civil Engineer. For nearly a year subsequently he was engaged with the Chesapeake and Ohio Railway Company in their Engineering Department. Leaving that employment, he entered the University of Virginia in 1874, graduating in 1876. From 1879 until 1882 he was engaged with the American Steamship Company in the capacity of Surgeon and Purser. He entered the service of the Pennsylvania Railroad Company as rodman in the Engineer of Maintenance of Way's Office, at Altoona, on October 7, 1882. February 1, 1883, he was assigned to duty on the Construction Corps of the Schuylkill Valley Railroad between Norristown and Phoenixville, where he remained until January 1, 1884. Subsequent assignments have been as follows: In the office of Principal Assistant Engineer, Altoona, from January 1, 1884, until May, 1884; Assistant Supervisor at New Florence, Pittsburgh Division, from May, 1884, until November, 1885; transferred to Assistant Supervisor at Lancaster until August, 1887; Supervisor at Osceola until May 13, 1889; Supervisor at Middletown until January 1, 1893, when promoted to present position as Assistant Engineer, West Penn Division.

Mr. George C. Wilkins, General Agent, Baltimore, was born in England on January 29, 1835, and began his long, honorable and fruitful railroad life on August 3, 1853, as rodman on surveys and construction on the Pittsburgh and Connellsville Railroad. He continued in that service until October 5, 1856, when he became an Assistant Engineer on the surveys and construction of the Southwest Branch and the main line of the Pacific Railroad of Missouri. On October 1, 1861, he returned to the Pittsburgh and Connellsville Railroad, and served as Ticket Clerk, Ticket and Freight Agent and

Superintendent's assistant in the Transportation Department until January, 1863, when he entered the employ of the Philadelphia and Erie Railroad as Assistant Engineer on construction, in which capacity and that of Senior Assistant Engineer he was engaged until August, 1864, when he was made Resident Engineer of the Eastern Division of that road. In March, 1866, he was promoted to be Superintendent of the Middle Division, Philadelphia and Erie Railroad, and in March, 1867, to be Superintendent of the Tyrone Division of the Pennsylvania Railroad. In November, 1873, he was transferred to Baltimore as Superintendent of the Baltimore Division of the Northern Central Railway. Since that time he has occupied that position, and General Superintendent of the Northern Central Railway, Superintendent of the Baltimore and Potomac Railroad, the Union Railroad and General Agent at Baltimore, the duties the larger portion of the time being performed concurrently. His record in those positions comprehends almost the entire reconstruction of the Baltimore Division, the development of the Union Railroad, the double tracking of the Baltimore and Potomac Railroad, the creation of a large portion of its terminals at Washington, and the complete reorganization of the methods of operating these roads. For this work he was well equipped by his various experiences. When he took charge of the Baltimore Division in November, 1873, the property was in a very unsatisfactory condition, its superstructure generally laid with iron rails, and with few exceptions the bridges on the line were of wood and had nearly reached the limit of serviceable condition. To give the details of the rebuilding of the Division, the ballasting and relaying of the track with steel rails; the replacing of the weaker iron and wooden bridges with iron bridges adapted to the heavier locomotives and trains of the present day; the establishment of greater system and higher discipline in its operation; the development of its suburban travel and business, would make this sketch too voluminous, and they are therefore omitted. What has been said in reference to Mr. Du Barry's reorganization and rebuilding of the road related prior to 1873. Mr. Du Barry laid the foundation, but the development of the Baltimore Division, and the establishment of its complete terminal facilities at Baltimore, in connection with the Pennsylvania

Railroad system, have been accomplished since then. Of the improvement of the road north of Baltimore to Harrisburg and Marysville, it is only necessary to say that previous to 1883, when Mr. Wilkins retired from the General Superintendency to become General Agent at Baltimore, it had been brought up to the standard of the Pennsylvania Railroad in respect to its roadway, tracks, masonry and bridges. In January, 1875, Mr. Wilkins was appointed Superintendent of the Baltimore and Potomac Railroad, the Alexandria and Washington Railroad and the Alexandria and Fredericksburg Railway, in addition to his duties as Superintendent of the Baltimore Division; in 1882 he was made General Superintendent of the lines under his charge, extending from Marysville and Harrisburg on the north to the southern terminus at Quantico, Virginia, including in his jurisdiction the large and varied interests of the Pennsylvania Railroad Company at Baltimore and Washington.

The Baltimore and Potomac Railroad was opened for business between Baltimore and Washington July 2, 1872, using Lafayette avenue, in the western section of the City of Baltimore, as its temporary terminus, but it was not until June 29, 1873, upon the completion of the Baltimore Tunnel, that trains were run through between Washington and Calvert Street Station, Baltimore.

When Mr. Wilkins took charge of the Baltimore and Potomac Road it had only a single track, with a large passenger traffic, constantly increasing, and its operation was a task involving the most constant care and great anxiety; short extensions of the second or double track were laid from time to time to afford relief, but in spite of these measures the road continued to be overtaxed by the volume of traffic between Washington and the North and West, via the Northern Central Railway and Pennsylvania Railroad, and between the East via the Philadelphia, Wilmington and Baltimore Railroad and the Atlantic Coast Line. Until 1881 only a portion of the traffic between Washington and Philadelphia and New York passed over the Baltimore and Potomac Road, the bulk of it going via the Baltimore and Ohio Railroad, which had handled all of it previous to the construction of the Baltimore and Potomac Road. In the early part of 1881 the Philadelphia, Wilmington and Balti-

more Railroad and all its branches passed under the control of the Pennsylvania Railroad Company, and thereafter the entire volume of its business to and from Washington and points south thereof was thrown over the Baltimore and Potomac Road, making the completion of a second track over the entire line an absolute necessity; this was finally accomplished early in 1883, and the double track between Washington and Baltimore was put into operation on May 27 of that year.

Mr. Wilkins has shown great ability and signal success in the direction and management of men. This is largely due to the fact that while he demands and secures the best possible results from their labor for the Company, his treatment of employees is just and kindly, attaching the men to the service, and creating that *esprit de corps* so essential in the operations of a great trust involving the employment of a large number of men. As a basis for this structure he has always retained in himself the final judgment in all cases of discipline, and never delegates to a subordinate the right to suspend or discharge an employee for cause. If any proof of his wisdom in this course is wanted it is abundantly shown in the properties and their management during the time they were under his charge, in their great improvement and successful operation. When he was transferred from the Tyrone Division of the Pennsylvania Railroad to the Baltimore Division in 1873, he left that Division, which he had received in the usual poor condition of a lateral branch, fully up to the Pennsylvania Railroad standards, and carried with him to his new field of labor the esteem and good will of the employees left behind, as evidenced by a handsomely engrossed testimonial now hanging in his office, to "the ability, judgment, and, above all, the high regard you have always shown for the just rights of all with whom your public business or private intercourse has brought you in contact, has not only resulted in the success of this Division, so that it stands second to none, but has won from all a warm regard for you, both officially and personally." Again, in the memorable strike of 1877, the employees of the Baltimore Division, shopmen as well as trainmen, recognizing his conscientious interest in their personal welfare, in the panicky condition of workingmen at that critical period, responded to his appeal to their

manhood and loyalty by determining that there should be no strike and no violence on the Baltimore Division, and there was none. Language cannot fitly describe the feverish condition of labor, or the anxiety of those supervising it at this critical juncture; but Mr. Wilkins knew his men, and was known and recognized by them to be wise and just, and his words of counsel and admonition, fitly spoken and at the right time, stilled the threatened tempest in North Baltimore, while under similar circumstances in South Baltimore the strong arm of the military was required to protect the property of the Baltimore and Ohio Company, with only partial success. Not a dollar's worth of damage was done to the property of the Northern Central Railway Company during that crisis. Thomas A. Scott, President of the road, in his annual report dated February 28, 1878, in commenting upon the strike, said: "It is a source of great gratification to be able to commend the prompt action of Mr. Wilkins, Superintendent of the Baltimore Division, and the sensible and prudent course pursued by the other officers and men in your service connected with the operation and maintenance of your line through which the men declined to join in the strike, and remained at their posts. The Board desire to place on record their appreciation of this most satisfactory and honorable action upon the part of your officers and employees."

And Mr. Frank Thomson, then General Manager, in his report, said: "It is a source of great gratification, however, to state that under the guidance of Mr. George C. Wilkins, Superintendent of the Baltimore Division, our men stood firmly at their posts, manfully protected the property of the Company, faithfully and zealously performed the duties required of them, and exhibited a degree of loyalty and fidelity that, in view of the trying circumstances, is especially commendable."

In January, 1883, Mr. Wilkins was appointed General Agent at Baltimore for all the railways centering there which are allied in interest with the Pennsylvania Railroad Company. His duties require him to keep himself advised in respect to commercial and other questions affecting the interests of the Company, and to have general supervision of the business of freight and passenger stations at Baltimore. At the time of his appointment he was relieved of

the duty of operating the Baltimore Division and the Union Railroad, which were then attached to the General Superintendency north of Harrisburg. He continued in charge of the operations of the road south of Baltimore until the completion of the double track on the Baltimore and Potomac road in June of the same year, when these lines were added to the Philadelphia, Wilmington and Baltimore system.

John M. Wallis, General Superintendent of the Philadelphia and Erie Division and Northern Central Railway, was born at New Orleans, La., on December 10, 1853. He entered the railroad service on the 17th of January, 1877, as apprentice in the Northern Central Railway shops at Baltimore. In November, 1879, he was appointed Assistant Road Foreman of Engines, Northern Central Railway and Baltimore and Potomac Railroad, in which position he continued until December 1, 1881, when he was appointed as Assistant Engineer of Tests at Altoona. On June 1, 1882, he was promoted to be Superintendent of Motive Power, Northern Central Railway; on June 1, 1883, to be Superintendent of Motive Power, Philadelphia, Wilmington and Baltimore Railroad; and on June 1, 1890, to be Superintendent of Motive Power, Pennsylvania Railroad Division. On the 14th of May, 1896, by reason of the continued ill health of Mr. Frank L. Sheppard, General Superintendent of the Pennsylvania Railroad Division, Mr. Wallis was appointed Acting General Superintendent, and assumed the duties of that position in connection with his other duties. The dual responsibility was shouldered and carried with success. Mr. Sheppard returned to duty September 14, 1896, and Mr. Wallis retired from the Acting General Superintendency. The death of Robert Neilson on October 12, 1896, leaving a vacancy in the General Superintendency on the Philadelphia and Erie Railroad Division and Northern Central Railway, Mr. Wallis was promoted to fill it, and entered upon the discharge of its duties October 26, 1896.

C. A. Preston, Principal Assistant Engineer, was born in Philadelphia, September 16, 1852, and educated at the public schools and the Polytechnic College of Philadelphia, graduating from the latter institution in 1872. He immediately entered actively into his profession of Civil Engineer, being engaged until June, 1877, as

transitman and Engineer in Charge upon railroad surveys, location and construction of various projected lines and upon railroads in operation in Southern New York, New Jersey, Eastern Pennsylvania and Maryland. The financial depression during that period, due to the Jay Cooke failure, made all engineering positions on new railroads of very uncertain tenure. From June to December, 1877, Mr. Preston was employed on topographical surveys of Northeastern Philadelphia, under the direction of Mr. John H. Dye. About this time the ill-fated Brazilian venture of P. & F. Collins, contractors for the Madeira and Mamore Railway, was started, and Mr. Preston was appointed to a position on the Engineer Corps of this enterprise. The party was on the *Mercedita*, the first steamer that went to San Antonio, Brazil. A year was spent in the wilds of Brazil, and Mr. Preston returned to the States in 1879. He was then sent by Messrs. Collins to England as a witness in a suit of the bondholders against the Madeira and Mamore Railway.

Mr. Preston entered the service of the Pennsylvania Railroad in May, 1879, and was then employed, under the direction of C. S. d'Invilliers, on surveys for the Catonsville Railroad, and for changing alignment and grades of the West Pennsylvania Railroad. In 1880 he was transferred to Baltimore, and was appointed Assistant Supervisor of Baltimore Section of the Northern Central Railway in September of that year. In November, 1880, he accepted the position of Principal Assistant Engineer of the Mexican National Construction Company assigned to the Pacific Coast Division, and after active service of eighteen months in Mexico upon preliminary surveys, location and construction, returned to the United States in April, 1882, entered again into the service of the Northern Central Railway as Assistant Supervisor, and located at York.

Mr. Preston has been in continuous service of the Pennsylvania Railroad since that time. He was promoted from Assistant Supervisor at York to Supervisor Section No. 1 August 1, 1882, and transferred from that section to section Baltimore in 1883, which position he occupied until January 1, 1890, when he was appointed Assistant Engineer of the Baltimore Division. On March 1, 1893, Mr. Preston was promoted to Principal Assistant Engineer of the

Philadelphia and Erie Railroad Division and the Northern Central Railway, and holds that position to-day.

Edward Delavan Nelson, Superintendent of Motive Power, was born in the City of New York March 1, 1858. His early education was received at St. John's School, Sing Sing, New York, where he was prepared for entrance to the Sheffield Scientific School of Yale University, and after completing the course in Mechanical Engineering was graduated from that institution in June, 1879.

In February, 1881, Mr. Nelson entered the shops of William Sellers & Co., Philadelphia, as an apprentice, remaining there until October of the same year, when he went to Altoona as apprentice in the machine shops of the Pennsylvania Railroad Company.

While at Altoona he spent considerable time in Physical Test Department under Mr. J. W. Cloud, who was at that time Engineer of Tests.

He was transferred to Williamsport, Pa., as Superintendent of Motive Power for the Philadelphia and Erie Railroad Division and Northern Central Railway in May, 1885.

Hosea W. Kapp, Superintendent of the Baltimore Division, was born at Marietta, Pa., on the 23d day of July, 1844. He attended school until sixteen years of age at Northumberland, Pa., to which place his parents had removed. He entered the army as musician in the Fifth Pennsylvania Reserves in the fall of 1861, and served eleven months. In the fall of 1862 he entered the service of the Lackawanna and Bloomsburg Railroad as a laborer on construction work, and later served as laborer on work train. He continued with that road as a laborer and brakeman until the spring of 1863, when he entered the service of the Philadelphia and Erie Railroad as brakeman. He continued in the service of the latter Company through the various positions of brakeman, flagman, freight conductor, yardmaster, passenger conductor and trainmaster until the summer of 1866, when he was promoted to be Trainmaster of the Middle Division of that road, with headquarters at Renovo, Pa. In the spring of 1870 he was transferred to the Pennsylvania Railroad, and made Assistant Trainmaster of the Pittsburgh Division, with headquarters at Pittsburgh, a position he served in with great fidelity



E. D. NELSON



H. W. KAPP



W. G. COUGHLIN



W. B. McCALEB

until the spring of 1874, when he was promoted to be Trainmaster at Baltimore of the Baltimore Division of the Northern Central Railway. On January 15, 1875, he received the additional appointment as Trainmaster of the Baltimore and Potomac and Alexandria and Fredericksburg Railroads. When the reorganization took place on January 1, 1883, and Mr. George C. Wilkins became General Agent at Baltimore, Mr. Kapp was promoted to the Superintendency of the Baltimore Division.

William G. Coughlin, Assistant Engineer Baltimore Division, was born in Florence, N. J., in 1862, and educated at the Farnum School, Beverly, N. J. In 1876 he went to Brazil, S. A., as rodman on the Engineer Corps of the Madeira and Mamore Railway, which P. & T. Collins were building. During the summer of 1879 he was employed as rodman on private surveys made under the direction of Mr. C. S. d'Invilliers in Pennsylvania. Mr. Coughlin entered the construction department of the Pennsylvania Railroad Company in the fall of 1879, and was located at various points east of Pittsburgh on preliminary location and construction work. In March, 1883, he was transferred to the Maintenance of Way Department of the Northern Central Railway and appointed Assistant Supervisor at Baltimore. Was promoted in 1886 to Supervisor of Section No. 3, West Jersey Railroad, with headquarters at Millville, N. J., and transferred to Section No. 1 in 1891, with headquarters at Woodbury, N. J. On March 1, 1893, was appointed to his present position.

William B. McCaleb, Superintendent Shamokin and Sunbury Divisions, was born at Mt. Pleasant, Westmoreland County, Pa., in 1862, and entered the Company's service in March 1880, remaining constantly therein until the present time. His first work was as chainman on an Engineer Corps, located at Connellsville, engaged in constructing South West Penn branches in the coke region. He was afterwards placed in the Assistant Engineer's office of the Pittsburgh Division, and then in the Principal Assistant Engineer's office at Altoona. In April, 1883, he was appointed Assistant Supervisor at New Florence. Was also Assistant Supervisor at Harrisburg and Greensburg, and in October, 1886, was promoted to Supervisor on the Tyrone Division, where he remained a few

months, when he was transferred to same position at Middletown. He was again transferred to Downingtown, remaining until December, 1889, when he was promoted to be an Assistant Engineer, and assigned to the West Penn Division, and located at Allegheny City. In January, 1893, he was assigned to the Middle Division, Pennsylvania Railroad; October 1, 1895, was promoted to the Superintendency of the Bedford Division, and on December 10, 1896, promoted to his present position.

Henry P. Lincoln, Assistant Engineer, was born in Philadelphia in 1858. After graduating as a Civil Engineer from the University of Pennsylvania, he entered the Pennsylvania Railroad service in 1880 in the Principal Assistant Engineer's office, United Railroads of New Jersey Division, as a rodman on the Engineer Corps in charge of building the grain elevators, piers, bulkheads, tracks and other improvements at Harsimus Cove, Jersey City. In 1881 he was promoted to be Engineer in charge of these and other works along the water front. Early in 1882 he was promoted to the position of Assistant Supervisor, Division A, New York Division, under James R. Smith. In November, 1882, he was returned to the Engineering Department, to take charge of the building of the present main line bridge across the Hackensack River and the passenger tracks across the Meadows. During the construction of this work the Principal Assistant Engineer was promoted to the position of Assistant Chief Engineer, and the work, with the Engineer Corps, was transferred to that Department, Mr. Lincoln being made Assistant Engineer on construction, which position he held until 1886. During this time he had charge of rebuilding the passenger station destroyed by fire at Jersey City; of surveying and building the Martin's Creek Railroad, including a bridge across the Delaware River; of surveys for branch lines, additional tracks along the New York Division, etc. In 1886 he returned to the Maintenance of Way Department as an Engineer in the Principal Assistant Engineer's office, Pennsylvania Railroad Division at Altoona. From there he was promoted to the position of Assistant Supervisor of the South West Pennsylvania Branch of the Pittsburgh Division under Samuel Dobson. In December, 1888, he was promoted to the position of Supervisor on the Monongahela Division,



H. P. LINCOLN



E. B. WESTFALL



E. J. CLEAVE



SPENCER MEADE

and in 1889 he was transferred to a similar position in the Philadelphia Yard on the Philadelphia Division. In 1891 he was promoted to the present position of Assistant Engineer of the Sunbury Division, Philadelphia and Erie Railroad, and Shamokin Division, Northern Central Railway.

Ezra B. Westfall, Superintendent, whose office is at Williamsport, Pa., was born at Bairdstown, Westmoreland County, Pennsylvania, on March 29, 1837. He received a common school education in the schools located on the line of the old Allegheny Portage Railroad while living at Planes Nos. 1, 4, 5 and 6 in Cambria and Blair Counties. Upon leaving school he entered the service of the Allegheny Portage Railroad at Plane No. 6 in April, 1852, as stationary fireman, and served in that capacity until August 1, 1854, when he entered the service of the Pennsylvania Railroad Company, Pittsburgh Division, as freight brakeman under Thomas A. Scott, Superintendent. At that time there were only three freight trains in each direction in a day. In April, 1855, he was promoted to freight conductor; in September, 1857, to freight fireman, and in December, 1860, promoted to freight engineman. Preferring the Conducting Transportation Department, and having served under Mr. Joseph D. Potts on the Pittsburgh Division, he requested Mr. Andrew Carnegie, then Superintendent of that Division, to be transferred to the Eastern Division of the Philadelphia and Erie Railroad. He was transferred to that Division in January, 1863, as freight conductor, and in March, 1863, was promoted to Yardmaster at Williamsport. In August, same year (1863), was promoted to Trainmaster of the Eastern Division, Philadelphia and Erie Railroad, and in August, 1873, to Superintendent of the Sunbury Division. In June, 1877, was transferred to the Superintendency of the Middle Division, Philadelphia and Erie Railroad, at Renovo, Pa., and in August, 1883, transferred to Superintendent of the Eastern Division, Philadelphia and Erie Railroad, and Susquehanna Division, Northern Central Railway, at Williamsport, Pa.

Ernest J. Cleave, the Assistant Engineer of the Eastern Division of the Philadelphia and Erie Railroad and Susquehanna Division of the Northern Central Railway, located at Williamsport, Pa., was born in Philadelphia, February 1, 1864. He received his educa-

tion at Andalusia, Pa., Gambier, Ohio, and St. Vincent's College, Latrobe, Pa. On July 18, 1881, he entered railroad service as rodman on the Pittsburgh and Western Railroad. On the 24th of October, 1881, he was appointed transitman on the Pittsburgh and Atlantic Railroad. On December 1, 1881, he entered the service of the Pennsylvania Railroad Company as rodman and was attached to the office of the Principal Assistant Engineer at Altoona. April 3, 1882, he was transferred as rodman to Assistant Engineer's office, Pittsburgh Division; August 1, 1884, to office Engineer M. W., Altoona, and on January 15, 1886, was appointed Supervisor Subdivision 21, Bellefonte. Transferred March 21, 1887, to Subdivision 2, Paoli; May 16, 1888, to Subdivision 11, New Florence; December 1, 1888, to Tacony, New York Division. February 6, 1889, he was promoted to be Supervisor, Subdivision 15, Philipsburg, Pa.; May 1, 1892, transferred to Subdivision 6, Mifflin, Pa.; and on January 1, 1897, promoted to his present position.

Spencer Meade, Superintendent of the Elmira and Canandaigua Divisions, was born January 19, 1850, at Philadelphia, Pa. Graduated as Civil Engineer from Polytechnic College, State of Pennsylvania, class of 1896. Entered railway service August 6, 1869, since which he has been consecutively, August 6, 1869, to March, 1870, rodman, Engineer Corps surveys Low Grade Division Allegheny Valley Railroad; April, 1870, to July, 1870, sub-Assistant Engineer on surveys Morrison's Cove extension, Pennsylvania Railroad; July, 1870, to April, 1871, Assistant Engineer surveys Allegheny Valley Railroad; April, 1871, to September, 1873, Assistant Engineer construction, same road; September, 1873, to March, 1874, Resident Engineer construction Summit Tunnel, same road; September, 1874, to March, 1878, Assistant Engineer Motive Power Department Pennsylvania Railroad; March, 1878, to May, 1880, Assistant Engineer Middle Division, Philadelphia and Erie Railroad Division, and May, 1880, to 1881, Assistant Engineer, same Division, Pennsylvania Railroad; September, 1881, to date, Superintendent Elmira and Canandaigua Division, Northern Central Railway.

Robert T. Morrow, Assistant Engineer, was born at Oswego,



R. T. MORROW



T. A. ROBERTS



J. K. JOHNSTON



J. W. REYNOLDS

N. Y., March 2, 1859. After passing through the public schools he took a two-years' course in the State Normal School at Oswego. March, 1876, he began work in the Northern Central Railway shops at Elmira, N. Y., and was employed in the machine shop and on engine repairs until July, 1877. From this latter date he prepared for Lehigh University, at which institution he entered in September, 1878, graduating as Civil Engineer in June, 1882. During the summers of 1880 and 1881, with Prof. Mansfield Merriman, he was engaged on the United States Coast and Geodetic Survey. July 4, 1882, he entered the service of the Pennsylvania Railroad, Philadelphia and Erie Railroad Division, in the Assistant Engineer's office at Williamsport, and in September of the same year took charge of an engineering corps for Engineer E. H. Welch, under Mr. J. N. DuBarry, in locating a line on the south side of the Susquehanna River from Keating to Lock Haven, and the construction of the Keating and Karthaus Branch. January 1, 1883, he returned to the Assistant Engineer's office of the Eastern Division at Williamsport, and remained there until April 1, 1883, at which time he was appointed Assistant Supervisor on the Eastern Division of the Philadelphia and Erie Railroad, Supervisor's Division No. 8. January 1, 1884, he was appointed Supervisor and Assistant Trainmaster of the Lewisburg and Tyrone Branch of the Philadelphia and Erie Railroad. April 15, 1891, he was appointed Supervisor at Altoona, and May 1, 1893, was appointed Assistant Engineer of the Middle Division of the Philadelphia and Erie Railroad at Renovo, and December 17, 1894, was transferred to Elmira, N. Y., as Assistant Engineer of the Elmira and Canandaigua Division of the Northern Central Railway.

Thomas A. Roberts, Superintendent of the Middle Division, Philadelphia and Erie Railroad, was born in Philadelphia June 20, 1841. He was educated in the public schools of that city. From 1858 to 1864 he was engaged in the service of the Survey Department of Philadelphia. In the latter year he entered the railroad service as rodman on the construction of the Pan Handle Railroad. He was transferred January 1, 1866, and served to August 1, 1867, as Assistant Engineer, Maintenance of Way Department, Middle Division, Philadelphia and Erie Railroad. From August 1, 1867, to

1870 he was Assistant Engineer construction Philadelphia and Erie Railroad. From 1870 to April 1, 1874, he was Assistant Engineer construction main line Pennsylvania Railroad. From August 1, 1874, to January 1, 1875, he served as Supervisor No. 3, Philadelphia Division Pennsylvania Railroad, and from January 1, 1875, to April 1, 1880, as Assistant Engineer of the Philadelphia Division Pennsylvania Railroad. From April 1, 1880, to August 1, 1883, he was Superintendent Bedford Division of the Pennsylvania Railroad, and from December 23, 1882, to August 1, 1883, acted as Superintendent of the Philadelphia Division. August 1, 1883, he was promoted to his present position.

John Kilgore Johnston, Assistant Engineer of the Middle Division Philadelphia and Erie Railroad, was born in Westmoreland County, Pa., May 8, 1860.

Mr. Johnston spent his boyhood in Westmoreland County, and was educated at Greensburg Academy. As a young man he spent much time in mine surveys and general work of this nature, an experience which well fitted him for certain phases of the railroad life he was to follow.

His railroad career began in January, 1880, when he worked in the Engineering Department of the Pennsylvania Railroad on a corps engaged in the location and construction of branch lines in the Connellsville coke region. Here he gained more experience in work connected with mining operations. From 1882 to 1885 he worked on construction of branch coal and coke lines on the South Pennsylvania. From this work he went to the Schuylkill Division at Reading, where he remained from January, 1885, to January, 1887. His work consisted in the building of branches to manufacturing plants, right-of-way surveys, and in the many miscellaneous engineering and practical problems that are incidental to the operation of a recently constructed railroad. He next became Assistant Engineer of Maintenance of Way at Altoona in the office of the Engineer of M. W. While there he had charge of the office under Mr. M. W. Thomson. During this time unusually important work was being done by this office, to wit: the laying of third track on Middle and Pittsburgh Divisions and changes in Altoona Yard. Mr. Johnston made the sewage survey of Altoona.

In October, 1888, he was appointed Assistant Supervisor of the Tyrone Division. His following steps were these : November, 1889, to December, 1889, Assistant Supervisor Middle Division at Mifflin; December, 1889, to February, 1891, Supervisor Monongahela Division at Brownsville and Monongahela City; February, 1891, to December, 1894, Supervisor Schuylkill Division at Norristown; December, 1894, to November, 1895, Supervisor Philadelphia Division at Middletown; November, 1895, to March, 1897, Supervisor Philadelphia Division at Paoli. He was made Assistant Engineer of the Middle Division of the P. and E. R. R. March, 1897.

J. W. Reynolds, Superintendent of the Western Division, was born in Evansburg (sometimes called Perkiomen), in Montgomery County, Pa., July 3, 1836. He finished his education at Burlington College, and entered the service of the Philadelphia and Erie Railroad Company at Williamsport, Pa., as chainman in the Engineer Corps, January 25, 1853. He was engaged in the construction of the road between Williamsport and Muncy until its completion between Williamsport and Milton in December, 1854. In March, 1854, he was promoted to rodman, and continued in that position until June, 1856, being engaged on the work between Milton and Sunbury. On June 1, 1856, he was promoted to be Assistant Engineer, and went to Erie in July, that year, when he was placed in charge of the Division extending from Erie to Corry. In June, 1859, he was appointed Principal Assistant Engineer on the Middle Division with headquarters at Ridgway. In July, 1860, the work on the Middle Division having been stopped for lack of funds, and the Western Division between Erie and Warren having been completed and in operation, he was transferred to the position of Freight and Ticket Agent at Erie. In January, 1865, a Ticket Agent was appointed, and he retained the position of Freight Agent from that time until March, 1868, when he was promoted to the Superintendency.

Mr. Reynolds has, in addition to his enviable railroad record, an army record, of which mention should not be neglected. The disasters in the "Seven Days'" battles in 1862 called forth a burst of patriotism throughout the country, and Mr. Reynolds was one of the first to respond to its call. He was mustered into the United States service in August, 1862, as Captain of Company A,

145th Regiment, Pennsylvania Volunteers, and, serving with bravery and distinction, he was promoted to the position of Major of the regiment, May 15, 1863, Major Patton having been killed at the battle of Chancellorsville. He resigned and returned to Erie, October 1, 1863, resuming the duties of his position as Agent there. All business of the station during his leave of absence in the army had been conducted by the clerks in charge in his name.

J. Supplee, Assistant Engineer of the Western Division, Philadelphia and Erie Railroad, is a native of Montgomery County, Pa.

He was educated at Freeland Seminary (now Ursinus College), Collegeville, Pa., and at the Polytechnic College of the State of Pennsylvania, in Philadelphia. After being graduated he was employed as Assistant Engineer in the topographical and other surveys and in the construction of Fairmount Park, Philadelphia, until he entered the service of the Pennsylvania Railroad Company, at Pittsburgh, in March, 1872, as Assistant Engineer in charge of grading and construction of the four track system on the Pittsburgh Division between Pittsburgh and East Liberty.

Was employed on the Pittsburgh Division, Pennsylvania Railroad, in surveys, construction work and maintenance of way work until August, 1879, at which time he was transferred to the Tyrone Division, Pennsylvania Railroad, as Supervisor of the Bald Eagle Valley Railroad, and Assistant Engineer of the Tyrone Division. On January 1, 1881, he was transferred to his present position.

F. Wolcott Jackson, General Superintendent of the United Railroads of New Jersey Division, was born August 24, 1833, at Newark, New Jersey, and entered the railway service on July 21, 1855, as Secretary of the New Jersey Railroad and Transportation Company. He was appointed Superintendent of the road in 1862 and continued as such until 1867, when he was appointed General Superintendent of the consolidated lines formed by the New Jersey Railroad and Transportation Company's line, the Camden and Amboy Branch, and the Philadelphia and Trenton Railroad, which position he occupied until 1871, when he was appointed General Superintendent of the United Railroads of New Jersey Division of the Pennsylvania Railroad.



J. SUPPLEE



F. WOLCOTT JACKSON



L. H. BARKER



H. S. HAYWARD

1

Louis H. Barker, Principal Assistant Engineer, United Railroads of New Jersey Division, entered the service of the Pennsylvania Railroad as Assistant Supervisor, Northern Central Railway, at York, Pa. Transferred for a short time in same position to Bowie, on the Baltimore and Potomac Railroad, from whence he returned to York. He was then promoted to Supervisor, Northern Central Railway, with headquarters at Parkton, Maryland. After an assignment to some special duties in connection with the Assistant Engineer's office at Baltimore, he was promoted to Assistant Engineer, Baltimore Division, with office at Baltimore. From Baltimore he went to Williamsport, Pa., as Engineer Maintenance of Way, Philadelphia and Erie Railroad and Northern Central Railway. He was transferred from that position to the one he now holds at Jersey City.

Henry Selby Hayward was born September 19, 1845, in Brooklyn, New York. When seventeen years of age he entered the Novelty Iron Works in New York as apprentice in marine engineering and naval construction. In 1866 he entered the service of the Pacific Mail Steamship Company in the Engineering Department, and during six years of service he occupied various positions up to that of Chief Engineer. Resigning that position he entered the shops of the Pennsylvania Railroad at Altoona as machinist and draughtsman. In 1874 he was appointed Assistant Road Foreman of Engines, and promoted in 1875 to the position of Assistant Superintendent of Motive Power, in charge of the United Railroads of New Jersey Division. In 1882 was made Superintendent of Motive Power of the same Division, with the addition of the West Jersey and Camden and Atlantic Railroads, to which was added the motive power, supervision and construction of all floating equipment of the Pennsylvania Railroad, numbering some 237 vessels, including the Jersey City Ferries, harbor lighterage, and steam towing in New York Harbor, the Delaware and Raritan Canal steam towing equipment, and the supervision of the West Jersey, Philadelphia and Camden, and the Camden and Atlantic Ferries.

O. J. Geer, General Agent at New York, has charge of the freight soliciting agencies in that city and Brooklyn ; has authority

to nominate to the General Freight Agent all agents under his charge, and in connection therewith reports to the General Freight Agent. He has control of all the freight stations in New York, Brooklyn and at Harsimus Cove, including the grain elevator, and is responsible for their efficient and economical management. He has authority to appoint all necessary employees for conducting the business under his charge. He has also the general supervision of the movement of the tugs, floats and lighters in New York Harbor. In the performance of these duties he reports to the General Manager and to the General Superintendent, United Railroads of New Jersey Division.

Mr. Geer was born in Norwich, Conn., in 1834, and began transportation service as Purser in 1851 on one of the Long Island Sound steamers. Continuing until 1853, he entered the service of the Merchants' Dispatch Line between New York and Philadelphia, in charge of westbound freight. Leaving that in 1856, he became Receiving Clerk in the Freight Department of the Camden and Amboy Railroad at New York, and continued as such until 1862, when he was promoted to be General Clerk of the same road in New York. In 1864 he was made General Clerk, Star Union Line, New York; 1865, Superintendent Piers, Union Line, same city; 1869, Agent Pennsylvania Railroad Through Freight Lines; 1879, General Agent Pennsylvania Company, Union Line Bureau, New York; and 1882, his promotion as General Agent Pennsylvania Railroad at New York was given him.

E. F. Brooks, the Superintendent of the New York Division, has only reached his present position after the most careful training, the closest application, and the highest efficiency in his work. He brings to it, with its greater responsibilities, a ripe judgment and a rare knowledge of men. He is a superior engineer, a good administrative and executive officer, and his discipline, though strict, is tempered with that kindness and sympathy which wins for him the respect, confidence and loyalty of his subordinates.

He was born on the 30th of September, 1848, in Cumberland County, N. J., and graduated from the Scientific Department of Rutgers College in 1872, since which time he has been engaged in the service of the Pennsylvania Railroad Company. He entered



O. J. GEER



E. F. BROOKS



L. W. ALLIBONE



WILSON BROWN

the service at Jersey City as assistant in office of Assistant Engineer, New York Division, United Railroads of New Jersey Division, in August, 1872, from whence he was appointed Supervisor, New York Division, at New Brunswick, serving from 1878 to 1880. His subsequent service has been as follows : Assistant Engineer, Middle Division, Philadelphia and Erie Railroad Division, 1880 to 1883 ; Engineer Maintenance of Way, United Railroads of New Jersey Division, 1883 to 1893 ; Acting Superintendent, New York Division, United Railroads of New Jersey Division, May, 1891, to 1892 ; Superintendent, Maryland Division, Philadelphia, Wilmington and Baltimore Railroad, 1893 to 1895 ; appointed Superintendent, New York Division, United Railroads of New Jersey Division, June 17, 1895.

Lawrence W. Allibone, Assistant Engineer, was born April 2, 1857, in Philadelphia, Pa., and educated at Cheltenham Academy, Pa., and Princeton College, N. J.

On April 1, 1880, he entered, as rodman, on Engineer Corps engaged in the construction of the Ohio and West Virginia Railroad, in Ohio, now a part of the Columbus and Hocking Valley Railroad. He remained with that road until November 12, 1880, when he entered the service of the Pennsylvania Railroad Company as rodman on Engineer Corps under Mr. Charles Barnes, with headquarters at Paoli, Pa. While on this corps he was engaged in making preliminary surveys, right-of-way surveys, and had charge of some of the construction of three and four tracks on Philadelphia Division.

From February 1, 1882, to April 7, 1882, he was levelman on construction work of three and four tracks, New York Division, and from April 7, 1882, to October 14, 1882, he was engaged in the office of Principal Assistant Engineer at Altoona. He was appointed Assistant Supervisor at Wall, Pittsburgh Division, on October 14, 1882, and on May 12, 1883, was transferred to Delaware Division, Philadelphia, Wilmington and Baltimore Railroad, as Assistant Supervisor.

He was appointed Assistant Engineer, Delaware Division, Philadelphia, Wilmington and Baltimore Railroad, March 1, 1884 ; transferred to Tyrone Division, November 1, 1889, and appointed Assistant Engineer, New York Division, April 1, 1891.

Wilson Brown, Superintendent of Amboy Division, was born at Philadelphia, Pennsylvania, on November 10, 1851. He was educated at private schools and Andalusia College. He entered railroad service in October, 1867, as chainman on the preliminary surveys of the Connecticut Western Railroad, since which time he has been continuously and variously employed in railroad service. That service may be given consecutively as follows :

1868 to 1869, rodman on construction Dutchess and Columbia Railroad ; 1869 to September, 1871, rodman on surveys and construction of boulevards, West Chester County, New York ; September, 1871, to October, 1873, Assistant Engineer Surveys and Construction Costa Rica Road, in Central America, under Henry Meiggs Keith and General Gmo Nanne, crossing from ocean to ocean. When track was laid was Assistant Superintendent between Alejuela and Catargo ; January, 1874, to March, 1876, Assistant Engineer preliminary surveys, New York and Housatonic Railroad and other surveys ; March, 1876, to April, 1876, in office of Engineer Maintenance of Way, Pennsylvania Railroad, Altoona ; April, 1876, to July, 1876, in Assistant Engineer's office, Middle Division, Pennsylvania Railroad, at Harrisburg, Pa. ; July, 1876, to February, 1877, as Assistant Supervisor, Subdivision No. 6, Middle Division ; February, 1877, to January, 1878, as Assistant Supervisor, Subdivision No. 7, Middle Division ; January, 1878, to December, 1879, as Supervisor of Subdivision No. 4, Philadelphia Division ; December, 1879, to July, 1881, as Assistant Engineer, Eastern Division, Philadelphia and Erie Railroad ; July, 1881, to December, 1884, as Assistant Engineer, Philadelphia Division ; December, 1884, to January, 1891, as Superintendent Frederick Division ; January 1, 1891, to January 1, 1893, Superintendent Belvidere Division at Lambertville, N. J. ; January 1, 1893, to date, as Superintendent Amboy Division, Camden, N. J.

Robert P. Snowden, Assistant Engineer, was born September 10, 1852 ; graduated from Lafayette College, Easton, Pa., 1872 ; Engineer Corps, Texas and Pacific Railroad, December, 1872, to May, 1873 ; with Cleveland & French, civil engineers, Indianapolis, Ind., May, 1873, to September, 1873 ; Engineer Corps, Pennsylvania Railroad, August, 1874, to January, 1875 ; Assistant Super-



R. P. SNOWDEN



A. P. GEST



A. W. PRESTON



R. BLOOMSBURG

visor, New Florence, Pa., Pittsburgh Division, January, 1875, to July, 1879; Supervisor Subdivision "E," Mt. Holly, N. J., Amboy Division, July, 1879, to March, 1882; Assistant Engineer, Belvidere Division, March, 1882, to April, 1883; Assistant Engineer, Amboy Division, April, 1883.

Alexander Purves Gest, Superintendent of Belvidere Division, was born at Philadelphia, February 2, 1853; was educated at the University of Pennsylvania and the Rensselaer Polytechnic Institute, graduating from the latter institution in 1874 as civil engineer. He was employed from April, 1875, to June, 1876, on the construction of the elevator and coal pier and terminal yards for the Northern Central Railway at Canton, Baltimore; during the winter of 1876-7, on location surveys for the Martin's Creek Railroad; from July, 1877, to March, 1879, on surveys and miscellaneous work under the Engineer Maintenance of Way; from March, 1879, to June, 1880, on location and construction of branch roads at and near Connellsville, Pa.; June 1, 1880, transferred to the office of Principal Assistant Engineer at Altoona; August 1, 1880, appointed Assistant Supervisor at Harrisburg; April 18, 1881, Assistant Supervisor at Gallitzin; September 1, 1881, Assistant Supervisor on the South West Branch, in charge of construction of the Sewickley and other branches; March 1, 1882, appointed Supervisor Subdivision No. 7, at Huntingdon, Pa.; March 1, 1883, appointed Assistant Engineer, Monongahela Division; October 1, 1883, Assistant Engineer, Pittsburgh Division; January 25, 1886, Assistant Engineer, New York Division; September 1, 1889, Superintendent, Bedford Division; January 1, 1891, Superintendent, Frederick Division; and January 1, 1893, Superintendent, Belvidere Division.

A. W. Preston, Assistant Engineer of the Belvidere Division, was born in the northern part of Cecil County, Maryland, in the year 1844. Was educated at Friends' Westtown Boarding School in Chester County, Pa., and served a year and a half as assistant teacher in the mathematical department of that institution. He entered the service of the Pennsylvania Railroad Company in 1870, and served as assistant on construction of the Sunbury and Lewis-town Railroad, principally on the bridge over the Susquehanna River, below Sunbury. In 1871 he was appointed Supervisor on

the main line at Huntingdon, and served in that capacity until 1882, when he entered the service of the Chief Engineer's Department as Assistant Engineer. On May 22, 1883, he was appointed Assistant Engineer of the Belvidere Division.

Robert Bloomsburg, Superintendent of Ferries, entered the service of the Camden and Amboy Railroad Company August 1, 1844, as a fireman on the steamer "Trenton," running between Philadelphia and Bordentown, N. J. He was promoted to Assistant Engineer in September, 1847, and to Chief Engineer, July, 1852, filling the latter position on the steamers "Trenton," "William Cook," and "Richard Stockton," and was appointed master of the latter boat in 1871. On the 1st of April, 1883, he was transferred to the Pennsylvania Railroad Ferries at Jersey City as Acting Superintendent, serving as such until April 1, 1884, when he received the appointment of Superintendent, a position he continues to fill with signal ability.

To H. F. Kenney, General Superintendent of the Philadelphia, Wilmington and Baltimore Railroad, no sketch can do justice, can fully portray his value as a factor in the development of railroad transportation in general and the Philadelphia, Wilmington and Baltimore system in particular. Called by Mr. Felton from the Fitchburg Road to aid him in his tremendous task of rebuilding and reorganizing that system and putting it on an economic yet paying basis, he applied himself to the work with a zeal, fidelity and ability which has characterized his forty-four years of continuous service since.

A valuable lieutenant of Mr. Felton, he shared with that official all the successes the corporation achieved in the fields of patriotism, trade and finance, whilst he brought the discipline of the line up to the highest state of efficiency. When Mr. Felton laid down the cares of office Mr. Kenney became the executive officer of the Company, under and only subordinate to President Hinkley. Clothed with almost autocratic power, he only used it to advance the interest of the Company, the community and the employees. His strong personality which has endeared him to employees of all grades springs from his rugged Plymouth ancestry. That line of men and women who made the government of their homes the type



H. F. KENNEY



A. FELDPAUCHE



C. M. MENDENHALL



W. N. BANNARD

upon which those of communities, municipalities and commonwealths were founded gave him for his blood inheritance a character which for earnestness of purpose, honesty in principle and justice toward peer or subordinate is fully recognized and appreciated in all circles. In his treatment of men under his direction if any doubt arises the man receives the benefit of it, but at the same time proper discipline is insisted upon. He can point with pride to the fact that in his long career no man could claim with truth unjust treatment at his hands.

Mr. Kenney is unusually broad in his views, modest and unassuming in manner, and possessed of a supreme desire to meet with fairness the issues presented. He ranks as one of the leading railroad men of the country, and his opinions on current transportation problems are highly regarded.

A. Feldpauche, Principal Assistant Engineer, was born in 1849. He was educated in the Central School of Arts and Manufactures, Paris, France. In 1872 he entered the service of the Pennsylvania Railroad Company as draughtsman in the office of the Chief Engineer, 233 South Fourth street, Philadelphia. Was promoted from the position of draughtsman to take charge of the general construction work on the various lines of the Pennsylvania Railroad, in which capacity he served for a number of years. His first staff appointment was Engineer in charge of the work in connection with the Department of the General Agent in Philadelphia, during the administration of Mr. Charles E. Pugh, and also Engineer of the Junction Railroad under the same management.

The Philadelphia, Wilmington and Baltimore Railroad Company, then an independent line, sought the services of Mr. Feldpauche, and he was appointed its Chief Engineer in 1881. After the purchase of the Philadelphia, Wilmington and Baltimore Railroad by the Pennsylvania Railroad Company, and the reorganization of that system, he retained under the change the position he now holds.

Some of the principal work placed in his care while Engineer in charge of construction were the changes of line at several points on the Pennsylvania Railroad, the rebuilding of the bridge across the Susquehanna River at Rockville, and the rebuilding of the bridge across the Raritan River at New Brunswick. He had charge of

the construction of the temporary trestle erected to replace Mayes Bridge, destroyed by the Johnstown flood, which structure, 640 feet long and 50 feet high, was erected ready for use in three and one-half days. He prepared the plans for the machinery and building of the Quaker City Cold Storage Warehouse, and supervised its construction, one of the first and largest structures of its kind in existence. He also prepared the plans and supervised the construction of the machinery and extensive buildings of the Philadelphia Market Company.

It will thus be seen that his field of labor has been distributed through the various lines of engineering, construction and maintenance work. He has been called to important positions in connection with the scientific investigations constantly going on in the Pennsylvania Railroad system, and at present holds the important position of Chairman of the Committee on Maintenance of Way in the Association of the Transportation Officers of the Pennsylvania Railroad. In that position he has brought very material credit to himself, as well as to the Company he represents in the engineering profession, by reason of the valuable papers he has prepared on a variety of subjects submitted to the Committee.

Mr. Feldpauche is equipped with a most thorough technical and practical education. His ability as an architect and hydraulic engineer are well known. Many important branches usually practiced by specialists in the engineering line are ably handled by him whenever necessity commands his services.

Personally he is a man of most courteous manners, simple tastes, and surrounded by a coterie of devoted friends. His ability to handle men is recognized by all. His fairness in disposition, determination of character are traits well marked, and the success which has attended his efforts indicate a power for combination and devotion to duty. His literary and musical studies occupy his leisure time. His home life has been that of deep and loving devotion.

C. M. Mendenhall, Superintendent of Motive Power, was born on the 2d of September, 1859, at Fortress Monroe, Va. His father was a Commissioned Officer in the United States Army. Consequently the son's youthful days were passed at various artillery posts along the Atlantic and Pacific coasts. His education was

obtained largely in the public schools of San Francisco, Cal., and private schools along the Hudson River, subsequent to which he entered the Military Academy Class, '82.

Leaving the academy he entered the Altoona shops in July, 1882, as an apprentice, working in the various departments, including the Test Department, until April, 1889, when he was appointed Assistant Road Foreman of Engines on the New York Division; a position he held until December, 1890, when he was made Assistant Master Mechanic Meadows Shops. In April, 1894, he was promoted to Assistant Engineer Motive Power of the United Railroads of New Jersey Division, and on the 17th of June, 1895, Superintendent of Motive Power of the Philadelphia, Wilmington and Baltimore Railroad Company.

The Maryland Division is one of the most important in the system, connects the cities of Philadelphia, Baltimore and Washington, and is of unparalleled importance to the Government from a strategic point of view. Its Superintendent, being brought into the closest relations with the District Government and Government Engineers at the National Capital, requires a high order of talent, coupled with patriotism and diplomacy, to suitably fill the position. The Company, however, has always shown most excellent judgment in its selections, and that of W. N. Bannard forms no exception. He is a worthy successor of such able predecessors as Messrs. J. B. Hutchinson and E. F. Brooks; is a man of education, pleasing address, kindly but retiring manners and forceful character, and is carving for himself from his present position more distinguished promotions. He was born in New York City, December 30, 1848; graduated at the Massachusetts Institute of Technology, in 1869, and entered the service of the West Jersey Railroad in September of that year as rodman. In 1872 he was appointed as Resident Engineer of the West Jersey Road; December, 1880, as Assistant Engineer New York Division; March, 1883, as Superintendent Camden and Atlantic Railroad; November, 1884, as Superintendent Schuylkill Division; December, 1884, as Superintendent Amboy Division; February, 1891, as Superintendent Altoona Division; and June 17, 1895, Superintendent of the Maryland Division; he is assisted by

Simon Cameron Long, Assistant Engineer, who was born near Harrisburg, Pa., September 7, 1857. He attended the public schools and graduated from the High School at Pine Grove, Pa., in 1873. He entered Lafayette College, Easton, Pa., the same year; took a full technical course, and graduated in 1877 with the degree of Civil Engineer. The same month of graduation he started conveyancing; later the same year he entered the service of the Philadelphia and Reading Railroad, serving in various capacities; then in the service of several coal mining companies in the lower Schuylkill region in engineering and other capacities. On April 3, 1881, entered the service of the Pennsylvania Railroad Company, by recommendation of the late Hon. Simon Cameron, as rodman in the construction of the four track system on the Philadelphia Division, rising to transitman, and was given charge of a corps. In April, 1882, on recommendation of Assistant Chief Engineer Robert E. Pettit, he was transferred to the Engineer's office at Altoona, since which time his appointments and promotions have been as follows: December 1, 1882, Assistant Supervisor, Pittsburgh Yard; May 16, 1883, Assistant Supervisor, Walls, Pa.; August 14, 1884, Assistant Supervisor, Philadelphia Yard; February 1, 1885, promoted Supervisor, Monongahela Division; November 1, 1885, Supervisor, Lancaster, Pa.; November 1, 1889, Assistant Engineer, Delaware Division, Philadelphia, Wilmington and Baltimore Railroad, and January 1, 1893, Assistant Engineer, Maryland Division, Philadelphia, Wilmington and Baltimore Railroad.

Robert L. Holliday, Superintendent Delaware Division, was born at Bellwood, Blair County, Pa., May 6, 1848. He was educated at Logan Academy, Bellwood, Pa., and Rensselaer Polytechnic Institute, Troy, N. Y. From 1869 to 1876 he was connected with the Bell's Gap and other railroads on preliminary surveys and construction work. He entered the service of the Pennsylvania Railroad Company in the office of the Principal Assistant Engineer at Altoona as rodman, March 22, 1876. On April 6, 1876, he was appointed Supervisor Bedford Division; December 15, 1879, Assistant Supervisor, Subdivision No. 10, Pittsburgh Division; April 20, 1880, Supervisor, Subdivision No. 4, Philadelphia Division; June 1, 1881, Assistant Engineer, Pittsburgh Division; October 1, 1882,



S. C. LONG



R. L. HOLLIDAY



L. J. ALLEN



C. J. BECHDOLT

Engineer Maintenance of Way, Pennsylvania Railroad Division; August 1, 1883, Superintendent, Bedford Division; May 1, 1889, Superintendent, Lewistown Division; July 1, 1890, Superintendent, Central Division, Philadelphia, Wilmington and Baltimore Railroad; April 1, 1891, Superintendent Delaware Division, Philadelphia, Wilmington and Baltimore Railroad.

Mr. Holliday is assisted by L. J. Allen, Assistant Engineer, who was born at Bordentown, N. J., on October 12, 1862. He was educated at New Jersey Model School and Philadelphia Polytechnic College. He entered the service on the West Jersey Railroad, September 24, 1879, as rodman. His subsequent employment has been as follows: On Engineer Corps, Philadelphia and Long Branch Railroad; fourth track work between Wilkinsburg and Bessemer, 1880-1881; in office Assistant Engineer Pittsburgh Division, December, 1881, to April, 1882; office Engineer Maintenance of Way Pennsylvania Railroad Division, April, 1882, to July, 1882; assisting Superintendent Lewistown Division, July, 1882, to January, 1883; as Assistant Supervisor Lewistown Division, January 17, 1883, to December 14, 1884; Assistant Supervisor Tyrone Division, December 15, 1884, to June 15, 1886; Assistant Supervisor, Downingtown, June 15, to October 19, 1886; Supervisor Tyrone Division, October 20, 1886, to November 16, 1887; Supervisor Monongahela Division, November 17, 1887, to February 5, 1889; Supervisor Subdivision "C" New York Division, February 6, 1889, to June 1, 1893; and Assistant Engineer Delaware Division since June 1, 1893, to date.

Charles Julius Bechdolt, Superintendent Central Division, was born April 20, 1852, at Knieling, near Carlsruhe, Baden, Germany. In the same year the family came to the United States and located in Easton, Northampton County, Pa. Mr. Bechdolt was educated in the public schools of Easton and Lafayette College, and in the Lehigh University, graduating from the latter institution in 1875 as a Civil Engineer. In August, 1875, he entered the service of the Pennsylvania Railroad as rodman in the Engineering Office of the Philadelphia Division, and after a few years in that capacity was given charge of the office and Division Corps. In March, 1879, he was appointed Assistant Supervisor Philadelphia Yard; in April,

1881, transferred to Pittsburgh Division as Assistant Supervisor at New Florence ; in April, 1882, promoted to Supervisor Monongahela Division at Monongahela City ; in August, 1884, promoted to be Assistant Engineer Tyrone Division at Tyrone ; in March, 1887, promoted to Assistant Engineer Middle Division at Harrisburg ; in October, 1889, promoted to Assistant Engineer New York Division at Jersey City ; and on April 1, 1891, promoted to Superintendent Central Division Philadelphia, Wilmington and Baltimore Railroad at Media, Pa.

The Division has felt his guiding hand whilst its physical features were being brought up to their excellent condition. Its great structural works and added facilities for conducting transportation have been promoted by his mastery of the engineering science. His discipline on the Division is superb, and he has, by his modest manners, kindness of heart, abilities and energy, won for himself the high estimation in which he is held in railway, business and social circles.

OLD SUPERVISORS.

To no single class of employees is the Pennsylvania Railroad Company more indebted for its splendid reputation than to the old line Supervisors and Section Foremen, and it is to be deeply regretted, from a sentimental view at least, that that rugged race of railroad men which emerged from the schools of labor and necessity in which it was educated is rapidly passing away, and in another generation, at most, will have become only a memory.

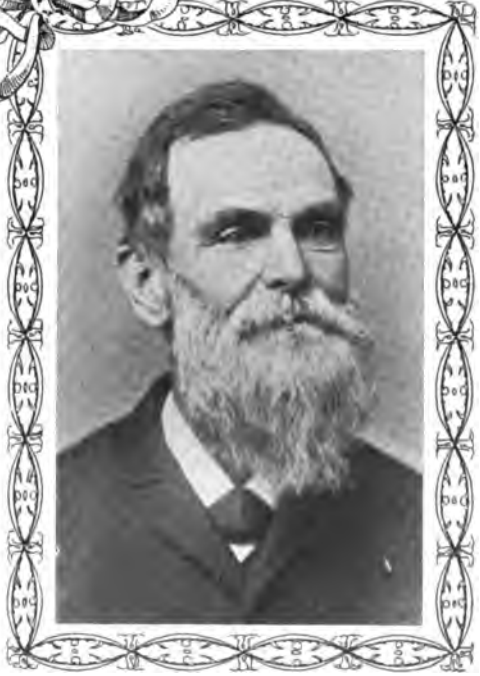
At the time of the completion of the Pennsylvania Railroad, Civil Engineers, properly trained to take charge of permanent way and be responsible for the supplies incidental to repairs, were scarce and not available, the location and construction of new lines demanding their services, so that before the technical schools could turn out men educated for the profession the management were compelled to turn to the ranks of trained labor for their Supervisors and Foremen. Well was the trust laid and well fulfilled, and the selections proved to be men of native ability, strong character, honorable, faithful and ambitious ; proud of their position and work, and proud of the Company they worked for.

Joining the rails, selection of ties, keeping the switches and



GARRETT H. ROBERTS

JAMES CULLEN



frogs in good order and the ditches open, ballasting and tamping so as to secure a safe, level and smooth-riding track, truly aligned on a well-drained bed, added to the care of and accountability for material, were no light responsibilities to lay upon their shoulders, but they met them nobly. They worked regardless of hours or conditions to make their tracks smooth and safe. They disregarded rain or shine, hurricane, flood or avalanche, light or darkness, to achieve that smoothness and safety, earning, however, for themselves the earnest respect and unbounded confidence of their superior officers. Many and many a Civil Engineer on the road has been indebted to these men for instruction in the practical part of their profession.

Now as the schools are turning out educated Engineers who take a post-graduate course along the track so as to fit them for Supervisors, the old line occupants of those positions are disappearing, but a few of the type remaining in the service (1898). Among them, however, is James Cullen. Mr. Cullen, who is Supervisor Subdivision 8, Spruce Creek, Pa., was born July 27, 1819, in the County Westmeath, Ireland, and came to this country in the early '40's, working on the repairs to Philadelphia and Reading tracks until February 8, 1850, when he engaged with a contractor in the construction of the Pennsylvania Railroad, preparing roadbed and laying first track in the vicinity of Birmingham and Tyrone Forges. He continued at that work until September 16, 1850, when the road was opened for travel to Duncansville. On that day, leaving the service of the contractor, he entered the service of the Pennsylvania Railroad Company as Assistant Foreman of the subdivision extending from Tyrone Water Station to a point one mile west of Tipton Station. In the following month he was appointed Foreman of that Division. In April, 1854, the Mountain Division, extending from Altoona to Conemaugh Viaduct, was opened, with Mr. C. D. Fuller as Supervisor and Mr. Cullen as his assistant, the latter locating at Wilmore. In the latter part of June of that year Mr. Fuller resigned, when, at his own request, Mr. Cullen was sent to Tipton as Foreman. During 1859 and 1860 he conducted an extra work train in the summer, and in the winter went back to his subdivision. On the 1st of January, 1861, he was appointed Super-

visor of the division he is still in charge of. During his forty-five years of continuous service with the Pennsylvania Railroad Company he has not missed an hour. Many changes have taken place in his superior officers during that time, and yet he has nothing but the kindest words to speak of any of them. Honorable and upright in all his dealings, true in all his relations of life, James Cullen stands to-day, at seventy-nine years of age, a typical old-time Supervisor, honored, respected and loved, with a reputation earned by his long years of faithful service to be emulated by the younger men in the Company's employ.

These sketches would be incomplete without some mention of the old line Foremen, of whom it has been said that it is a more difficult task to select one than it is to find an executive officer. A true representative man of his class is Garrett H. Roberts. Mr. Roberts is of Welsh and German origin, and was born in Bucks County, Pa., on February 14, 1824. His education in the county schools ceased when he was twelve years of age, at which time he went to work on a farm, where he remained until he was sixteen years old. He then went to the trade of wheelwright, under Mr. Randall, continuing in it until August, 1846, when he entered the service of the Camden and Amboy Railroad as carpenter, being assigned to duty on the road between Bordentown and Trenton. In March, 1847, he was transferred to Bristol and assisted in laying the "T" rail from there to Tacony. In 1848 he assisted in extending that rail to Kensington. In July of the latter year he was transferred to the division between Bristol and Trenton, under the direction of J. B. Wright. March 22, 1852, he was promoted to Foreman and placed in charge of the road from the bridge over the Neshaminy to the one over the Pennypack. In 1855 he was placed in charge of the road between Bristol and Torresdale, where he continued until 1864, when, double track having been laid, he was given charge of the section between Bories and Schencks.

Although the Pennsylvania Railroad Company took possession of the road at midnight between November 30 and December 1, 1871, under the lease, the sections were not shortened until 1874. Mr. Roberts, however, continued to hold his position until June,

1884, when he was appointed to his present position of Foreman in charge of the Bustleton Branch.

Although he has passed the allotted time of man—three score years and ten—Garrett Roberts is more erect and active than many men a score of years his junior. Fidelity to duty under the stimulus of responsibility has been his guide in life, and now as the shadows grow longer and the golden tints of sunset are settling upon him, he feels the repose of mind that comes to all who do their duties well.

PURCHASING DEPARTMENT.

The necessities in a railroad organization of a corporation like the Pennsylvania Railroad Company for material and supplies are so great and the articles entering therein being scattered over the fields of manufacture, mining and agriculture, and the sum of money requisite to pay for the same running up into millions of dollars annually, the position of Purchasing Agent becomes one of great importance and grave responsibilities. It involves judgment, tact and economy in buying and distributing, and a keen insight into the condition of the markets at all times. It is easier to waste revenues by carelessness, ignorance or duplicity in that department of railroad management than in any other, and the consequence is that its executive officer is most carefully chosen.

The Purchasing Agent of the Pennsylvania Railroad lines East of Pittsburgh and Erie purchases all articles required for the Company's use under such general instructions as he may receive from the President, Second Vice President or General Manager. He acts under the general supervision of the Committee on Supplies of the Board, to whom he furnishes such information and reports as they may require. Purchases for use in the Transportation Department are only made upon the written requisition of the General Manager or other officer in his department as he may designate. These written requisitions are sent directly to the Purchasing Agent. In reference to the purchase of tools, machinery, materials and supplies for use in the Motive Power Department, he specially advises with the Chief of Motive Power.

He keeps himself, the Chief of Motive Power and the General Manager informed in regard to the stock of materials on hand at

various points, and preserves in his office a complete record of all materials and supplies purchased, the amounts on hand at the end of each month, and where located. To avoid making unnecessary purchases, he, with the approval of the General Manager, makes such transfers of the material on hand as may be for the best interests of the service. The several officers in charge of material and supplies furnish him information from time to time as to the probable future needs of their departments.

Purchases for use in the departments other than the Transportation Department, are made upon the written requisition of such officers as the President may designate in writing.

Upon requisition approved by the Comptroller or Assistant Comptroller, he furnishes officers, agents and employees forms, blanks and stationery required in connection with the receipts and disbursements of the Company. Some idea can be formed of the magnitude of that branch of his duties when the fact is stated that over two thousand agents east of Pittsburgh and Erie are served with such forms, blanks and supplies and stationery, in addition to supplying one hundred and eighty-two Empire Line agencies throughout the West and all the Union Line agencies East of Pittsburgh. There are listed from eighteen to twenty thousand separate books, blanks and forms which are distributed under his direction.

Bills for all supplies purchased by the Company are rendered him in duplicate. After their examination he forwards the duplicate to the officer having charge of the supplies, who, upon receipt of the goods and finding them correct, certifies on the bill to that effect, and returns it to him through the General Superintendent. He then certifies on the original bill that the items mentioned therein were duly authorized and contracted for on favorable terms, and have been received for the use and benefit of the Company, and transmits the bill, approved for voucher, to the Auditor of Disbursements.

Subject to the supervision and direction of the General Manager, he has charge of the sale of old materials. Money received by him is immediately transmitted to the Treasurer, with statements thereof to that office and the Comptroller.

He keeps detailed accounts between his department and the



Transportation and other departments of the Company for supplies furnished them, and makes returns to the Comptroller at such times and in such manner as the latter directs.

He nominates to the Second Vice President, for the approval of the President and confirmation by the Board, all officers in his department, and has authority, with the approval of the Second Vice President, to appoint all necessary employees therein. He is aided by an Assistant Purchasing Agent, who acts for him in his absence and performs such other duties as he or the Third Vice President may assign to him.

Daniel S. Newhall, the Purchasing Agent, was born in Germantown, April 7, 1849, and educated in private schools. After taking a course in the chemical laboratories of Messrs. Booth and Garrett and Professor F. A. Genth, he began his business career as an apprentice in the Pennsylvania Sugar Refinery at Race and Crown streets, Philadelphia, of which he was Superintendent at the time of its destruction in 1870. Mr. Newhall continued in the sugar-refining business, and was a member of the firm of McKean, Newhall & Borie, at the old Levering Refinery, Church alley, from 1870 until February, 1882. He was then elected Assistant Secretary of the Pennsylvania Railroad Company, and in connection with that office has also filled the following positions until this date:

Superintendent Employees' Saving Fund from the date of its organization in 1887; Secretary of the Manor Real Estate and Trust Company; Assistant Secretary of the Philadelphia, Wilmington and Baltimore Railroad, Junction Railroad, and Philadelphia and Baltimore Central Railroad Companies. He is also Superintendent of the General Office Division of the Relief Department. Mr. Newhall has a national reputation as a cricket player, and for many years was Captain of the Philadelphia and United States Elevens in matches with English and American cricketers. He is the founder of the American Federation of Homing Pigeon Fanciers, and has bred and trained many of the famous homing pigeons of this country.

Samuel Porcher, the Assistant Purchasing Agent, was born in South Carolina on December 21, 1857, and after pursuing a regular course of study was graduated from the University of Virginia in 1881

Desiring to make railroad work his life's occupation, he began at the bottom, and entered the machine shops of the Pennsylvania Railroad Company as an apprentice on January 27, 1882, for fifty cents a day. He went through a full shop course, including the Test Department, and was transferred in 1888 from the Mechanical Engineer's office to the office of Superintendent of Motive Power in Jersey City. In July of that year he was appointed Assistant Engineer, Motive Power Department, United Railroads of New Jersey Division, in which position he remained until March 1, 1894, when he was appointed to the one he now occupies.

REAL ESTATE DEPARTMENT.

The Real Estate Department of the Pennsylvania Railroad Company must not be confused with land departments of the Western railroads. It is radically different in its organization and operations. The latter departments have charge of immense areas of land granted by the Government to aid in constructing the roads. They are in the market to sell the land to settlers and home-seekers, so as to establish along their lines a source from which flows both passenger and freight traffic; whilst the former is devoted solely to the acquisition and care of land and buildings necessary for the extension and operation of the Pennsylvania Railroad and its business.

Its business is of the same nature as pertains to like business conducted by individuals and the large trust companies, although more voluminous, more varied in character, and covers a greater extent of territory. Under the supervision of the President, the Department is in charge of a Real Estate Agent, aided by a Chief Conveyancer. The Real Estate Agent occupies that position not only for the Pennsylvania Railroad Company, but also for the companies controlled by the Pennsylvania Railroad Company, and companies the railroads and property and works of which are leased or operated by it; he is the custodian of the title papers relating to properties owned by all such companies and the maps of such properties, and examines and approves, in connection with the Chief Conveyancer, before execution, all conveyances of real estate, and all contracts for the leasing and renting of property to or

from the Company. He examines and approves all bills for purchase money for real estate and right-of-way, for taxes, water-rents, and other municipal claims, rents of leased property, ground-rents, interest on mortgages, and similar charges on real estate payable by the Company and expenses connected therewith, has charge of rents and collects the rentals of Company properties. He personally examines and keeps himself familiar with all the real estate in his charge, examines all assessments thereof for taxation, including water-rents and other municipal claims, and communicates with the District Solicitor directly in the interest of procuring proper valuations upon which such assessments may be based. The acquisition of all additional real estate and right-of-way upon or connected with the completed lines of the Company, and upon all new lines of railroad in which the Company may be interested, is made by him under the direction respectively of the General Manager, Second Vice President, or Assistant to the President, subject to the approval of the President, and all necessary instructions in connection therewith are given to him by such officers. The plans of such real estate and right-of-way are furnished him duly approved respectively by the General Manager, the Chief Engineer, the Engineer Maintenance of Way, or the Assistant to the President.

Real Estate Agent John C. Wilson was born at Washington, Pa., in 1832, and educated at Washington College. Upon being graduated he entered railroad life in September, 1851, as axeman in the Engineer Corps of the Hempfield Railroad Company, and was promoted through the various grades until he became Assistant Engineer in charge of Construction. In December, 1857, he took position as Principal Assistant Engineer on the Virginia and Kentucky Railroad. The President of the road, Hon. John B. Floyd, Secretary of War under President Buchanan, dispensed with the services of Northern men in October, 1859, and Mr. Wilson fell under the ban. In 1860 he was connected with the United States Commission in the exploration for a railroad route across the Isthmus of Chiriqui, and in 1862 entered the service of the Pennsylvania Railroad Company as Assistant Engineer for completion of Bedford Railroad from Hopewell to Bloody Run (now Everett). Mr.

Wilson continued in the Engineering Department of the Company until the creation of the Real Estate Department in March, 1884, when he was appointed the Real Estate Agent.

The Chief Conveyancer is George W. I. Ball, who, after having been engaged in the law and conveyancing business for many years, entered the service of the Company in the fall of 1862, in the office of the General Superintendent at Altoona, in connection with the Military Transportation business ; removed to Philadelphia and became Assistant General Passenger and Ticket Agent ; was transferred to the General Solicitor's Office, then appointed Assistant General Solicitor and Conveyancer, and finally, in 1884, was appointed Chief Conveyancer and transferred to the Real Estate Department. He has charge of all conveyancing for the several companies ; the preparation of briefs of title to real estate acquired ; examines and directs the execution of all deeds, bonds, mortgages, leases and other documents relating to the Company's real estate and rights-of-way, and is looked upon as one of the leading men in his profession in this country.

LEGAL DEPARTMENT.

The Legal Department is under the immediate supervision of the President and in direct control of the General Solicitor, who has the general charge of all litigation in which the Company is interested. This latter officer keeps himself thoroughly informed of the character and progress of legal proceedings and of claims by or against the Company. He keeps in his office entries of all suits or actions of every nature to which the Company may be a party, or in which it has an interest, so that he can at any time show the nature of such suits or actions and of the proceedings therein. He prepares opinions on any subject that may be referred to him by the President or Board, supervises the preparation of all contracts to be executed by the Company, and prepares all forms of bonds which are printed under his direction. It is his duty after being notified by the officer making the appointment to procure the bonds required by the regulations to be given by officers, employees and others, and when procured transmit them to the Comptroller.

Where bonds are given to protect the Company by reason of



PARKER B. PRINCE



J. A. LOGAN



GEORGE V. MASSEY

issuing of new stock certificates, bonds, or other evidences of indebtedness, in lieu of such matters lost or destroyed, or bonds given for the extension of credit to shippers, or for any other purpose in the affairs of the treasury or other department, the head of the department shall send the bond to the Finance Committee for examination, and if found satisfactory, the approval of the General Solicitor shall be had to the sufficiency of the surety before the Finance Committee place their approval thereon. Bonds received as above for matter chargeable to the treasury or other department shall remain in the custody of the head of the department until settlement or discharge of the obligations thereof and the surrender of the bond authorized by the Finance Committee.

It is his duty in all cases of defalcation, on being advised of all known facts in the case by the Comptroller and of his inability to collect the same, to communicate with the sureties so far as he may consider them interested, and take the necessary steps for the prompt collection of any deficiency. He nominates to the President for his approval and for confirmation by the Board, all officers in his department, and has authority, with the approval of the President, to appoint all necessary employees therein. His office is at Philadelphia, and he is aided by an Assistant General Solicitor whose duties are defined to be "to act for the General Solicitor in his absence, and to perform such other duties as may be assigned to him by the General Solicitor, the President or the Board."

James A. Logan, General Solicitor, was born in Westmoreland County, Pennsylvania, in 1840. After reading law in Greensburg he was admitted to the Bar, and engaged in general practice in Westmoreland and the adjoining counties. For a number of years he enjoyed a successful practice, which he relinquished to accept the Judgeship of the judicial district composed of the counties of Westmoreland, Indiana and Armstrong. In 1879 he resigned his judicial position to become Assistant General Solicitor of the Pennsylvania Railroad Company, which responsible position he filled with such conspicuous ability, winning such a high place in the councils of the Company he so ably represented, that upon the retirement of the Hon. John Scott as General Solicitor on February 1, 1895, he was immediately promoted to the vacancy.

The magnitude and extent of the business which concentrates in the General Solicitor's office may be inferred from the fact that the treasurers of almost all the subordinate companies controlled by the Pennsylvania Railroad Company have their offices in the general office building, and hence all questions relating to transfers of stocks, payments of dividends and interest come to that office. In addition to the mass of litigation in the hands of over seventy local solicitors, its pending cases average over 2000, to say nothing of the preparation of contracts, settlement of cases and other matters in which legal advice and guidance is constantly required. These manifold cares make Judge Logan one of the busiest men in the great corporation, and place upon his shoulders enormous responsibilities. Judge Logan is a man of fine intelligence and wide learning. As a lawyer he won enviable fame in the Courts of the State, and he retired from the Bench with the honors of a jurist added to the laurels of a lawyer.

George V. Massey, Assistant General Solicitor, was born December 16, 1841, in West Whiteland Township, Chester County, Pennsylvania, and removed to the State of Delaware in 1849, having since the year 1855 resided at Dover in that State. He received an academic education, principally at Freeland Seminary (now Ursinus College), in Montgomery County, and at a boarding school at Delaware Water Gap. He served with distinction in the war for the Union as a first lieutenant, Delaware Volunteer Cavalry, U. S. A., and on the General Staff of the Army as Assistant Adjutant General and Assistant Inspector General, with the rank of Captain and Lieutenant-Colonel, respectively. Admitted to the Delaware Bar in October, 1865, and was for thirty years engaged in active general practice of his profession in that State, becoming a Solicitor for the Philadelphia, Wilmington and Baltimore Railroad Company in 1876. Was a member of the World's Columbian Commission, and also one of the "Council of Administration" which was charged with the supervision and general management of the Exposition. A Republican in politics from the formation of that party in his State, but has never held public office. Has represented his State as a Delegate-at-Large in the Republican National Conventions at Chicago in 1884, and at Minneapolis in 1892. Was appointed As-

sistant General Solicitor, Pennsylvania Railroad Company, August 1, 1895, and now resides in Philadelphia. Mr. Massey is a man of striking personal appearance, over six feet in height, and has considerable of that which attracts men and wins warm personal friendships.

Parker B. Prince, of the Legal Department, was born in Essex, Mass., September 18, 1851. He removed in January, 1863, to Washington, D. C., where he became a page in the United States House of Representatives, serving in that capacity for several years. He then became a stenographer, and as such assisted in reporting the debates and proceedings in the House of Representatives and in committees. While so engaged he was appointed the Clerk of the Committee on Foreign Affairs of the House of Representatives. He resigned that position and entered the service of the Pennsylvania Railroad Company on October 8, 1872, as stenographer for Mr. William J. Howard, then its General Solicitor, and Mr. George B. Roberts, at that time Fourth Vice President. As the business increased he was attached solely to the Legal Department, with which he has since been connected. In a few years he became Chief Clerk of the Department, and on March 1, 1895, was made its Chief Law Clerk, and subsequently was promoted to be Assistant to the General Solicitor. While connected with the Legal Department he in his leisure hours studied law and was admitted to the Bar.

INSURANCE DEPARTMENT.

The business of the Insurance Department is under the general supervision of the Second Vice President, in charge of a Superintendent, appointed by the President, and who, by and with the advice of the Insurance Committee, manages the affairs of the Department, and has the custody of all insurance policies, schedules of properties and maps and plans for insurance purposes.

He is required to keep in his office such books and records of the affairs of the Department as may be necessary for the information of the proper officers and of the Insurance Committee.

He has charge of all matters connected with fire, marine and other insurable risks and losses, and inspections of property with reference to protection against these risks, and all matters pertaining to the same which shall be referred to the Department.

It is his duty to effect the necessary insurance and arrange for the settlement of losses to property belonging to the Company or for which it may be responsible, and he causes to be made all necessary inspections of the Company's properties with reference to fire, marine and other insurable risks and their protection.

An Insurance Fund was commenced by the Pennsylvania Railroad Company as early as January, 1870, but the Department was not organized until several years later, when the subject was referred to the Finance Committee, and on November 26, 1878, this Committee recommended that an Insurance Bureau be organized and a Committee on Insurance appointed.

This report was adopted, and the By-Laws and Organization of the Company were amended by the Board of Directors January 17, 1879, in accordance with same. The Committee appointed was composed of John Prince Wetherill, Chairman, and Messrs. Geo. B. Roberts, N. P. Shortridge and Henry D. Welsh.

The accounts of the Department were first placed under the charge of the late Treasurer, Mr. T. T. Firth, who retired in February, 1879, to give place to Mr. W. W. Curtin as clerk, to whom more active duties were assigned. Mr. Curtin was succeeded by Mr. Hugh B. Ely, October 1, 1882, with title of Secretary, which title was changed March 22, 1893, to Superintendent.

A very important feature of the Department, and by some even thought to be its most important, is that of inspection of property as to fire hazard, with recommendation for improvement and of appliances for fire protection. This commenced in 1882, but it is within the past nine years that it has been brought up to its present high state of efficiency.

The knowledge requisite to make intelligent inspection and recommendation had to be acquired by careful study, observation and experience.

These inspections were at first made by the officer in charge, but it was soon found necessary to employ an assistant in the person of Mr. Robert H. Newbern, who came into the Department in February 1888; he was joined by Mr. Justin Peters in November, 1891.

For the past six years all the property of the Company has had

at least an annual inspection, with more frequent visits in special cases. Reports of all these inspections are made to the Insurance Committee and by them carefully considered and referred to the General Manager for such attention as they may require.

Intimately connected therewith, and largely developed thereby, has been the active interest shown by the officers and men in the employ of the Company in the care and protection of its property, until now every piece of property has its protection against the peculiar hazard to which it is subject. This being notably the case in regard to the fire hazard, where the protection afforded ranges from the filled firepail, with its one man to handle, up to the full equipment of firepails, chemical and hand-pump extinguishers, steam and chemical fire engines, hose-carts, hook and ladder trucks, etc., supplied at the large shops, stations and terminal and ferry buildings, which are manned by full complements of the Company's employees, who by frequent drills are made thoroughly familiar with their use. At all points also where special care is needed, day and night watchmen are employed. As a natural result of all this, especially as manifested in the faithfulness and efficiency of employees, the fire losses show a continuing decrease.

Hugh B. Ely as Superintendent of the Insurance Department was born near Mine Springs, Bucks County, Pa., March 9, 1838, and was educated chiefly in the Friends' Schools in Buckingham, Bucks County, Pa. After a few years spent in mercantile pursuits he entered the service of the Belvidere-Delaware Railroad Company on July 26, 1856, as Assistant Bookkeeper in the Superintendent's office at Lambertville, N. J. Immediately after the United Railroads of New Jersey were leased to the Pennsylvania Railroad Company in February, 1872, he was elected Secretary and Treasurer of the Belvidere-Delaware Railroad Company, filling the dual position until February, 1895, when, owing to the increasing demands upon his time in connection with the Insurance Department, he resigned. He remains, however, in the Board of Directors of that Company, of which he has been a member since February, 1881.

Mr. Ely was also Secretary and Treasurer of several other of the branch lines in New Jersey for years

Upon the death in October, 1882, of the late Ashbel Welch, President of the Belvidere-Delaware Railroad Company and Chief Engineer of Construction of the Pennsylvania Railroad Company on its New Jersey lines, of which department Mr. Ely was Chief Clerk, he was directed to report at the General Office in Philadelphia, where he was given charge of the Insurance Department of the Pennsylvania Railroad Company, first as Secretary, and then as Superintendent. He has also been Secretary and Treasurer of the Merchants' Warehouse Company since its organization in 1886.

Mr. Ely became a member of church in early life, and that fact has had a very important bearing on his railroad career, now covering nearly thirty-nine years, and has been a potent influence in whatever business success he has achieved, as it has no doubt shielded him from many temptations incident to a public life, to which he might otherwise have yielded.

VOLUNTARY RELIEF DEPARTMENT.

The old, well-worn saying that corporations are soulless, and which flippantly fell from the lips of demagogic exhorters in their efforts to attract public attention, has fallen into "innocuous desuetude" by reason of the provisions thrown by the management of railways around railway employees, so that come sickness or death they or those dependent upon them may not be left helpless upon the cold charities of the world.

The frequent charitable appeals to the officials of the Pennsylvania Railroad Company, and, in fact, to the employees generally, for the relief of some sick or disabled employee or his distressed family, turned the attention of the management toward a comprehensive plan whereby that relief could be given as a right and not as a charitable gift, and yet preserve that generous feature of humanity whereby one helps another without the recipient feeling the sense of pauperism which accompanies receiving something without an adequate return.

Out of attention, agitation and desire, the Voluntary Relief Department of the Pennsylvania Railroad Company was evolved, having for its object the establishment and management of a Relief Fund for the payment of definite amounts to contributing em-



HUGH B. ELY



S. W. LATT



J. A. ANDERSON



H. D. ELY

ployees, who, under proper regulations, shall be entitled to receive the same when they are disabled by accident or sickness, and in the event of death to the relatives or other beneficiaries specified in the application of such employees. The organization of the Department is upon such a broad basis that it is prepared to manage any kindred subject, such as pensions, gratuities, etc., that may be assigned to it by the Board of Directors, the President, the Second Vice President or the General Manager of the Company.

The Fund from which the benefits are paid is formed from voluntary contributions from employees, appropriations by the Company, when necessary to make up any deficit, the income or profit derived from investments of the money of the Fund, and such gifts or legacies as may be made to the Company for the use of the Fund.

None but employees of the Company can participate in the benefits, and they, when admitted to such participation, are known as members of the Relief Fund, having a right to vote for members of the Advisory Committee, and being eligible to election to membership in that Committee. The Advisory Committee, the General Manager of the Company being ex-officio a member and its Chairman, is partly chosen by the Board of Directors and partly by the membership, and has general supervision of the operations of the Department, sees that they are conducted in accordance with the prescribed regulations, and recommends for approval by the Board of Directors any changes to be made therein. The money received by the Relief Fund is held by the Company in trust for the Relief Department, and beyond the amount which is not required to be kept in hand for current use is invested under the direction of the Advisory Committee, which is also intrusted with making any necessary or prudent changes in the character of the investment. The expenses of operating the Department do not come out of the Fund, but are borne by the Company. The value of the Fund depends largely upon the system of medical examination of applicants for membership and members reported disabled. For this reason the selection of examiners is made with the greatest of care, after thorough competitive examination, emphasis being placed upon the character, training and address. Their whole procedure is for the

benefit of the men, protecting the well whilst doing justice to the sick or injured. At times attempts are made to belittle or undervalue them. Such attempts should be frowned down, and all members should show a high appreciation of these men and their services, for the fact cannot fail to be recognized that physicians who, laying down the scalpel and the mortar and pestle, taking up the stethoscope and tape measure, and becoming wielders of vital statistics, do not lay down any of the traditional honor of their profession, but are just as true, just as ambitious, just as proficient in its special as they are in its general line of practice, and just as much entitled to all the confidence, respect and appreciation that is freely granted to the medical profession in other lines.

In dissipating from the minds of some people the distorted ideas which possess them in regard to the Fund, the assurance is safely given that it is not, nor is it intended to be, a high and wrathful court, dealing out in all severity the punishments as prescribed by the ancient Mosaic law ; nor is it like a court-martial, constituted to convict ; nor, again, like some insurance companies and some beneficial societies, whose chief aim seems to be the evasion of payment, or to pay as little as possible ; but it is an institution founded and conducted on higher, broader, better principles—the principles to govern a community of brethren, sharing one another's burdens under the guidance of a paternalism as mild, as charitable, and as just as the one founded by Him who fed the hungry, healed the sick, and succored the distressed.

The Department is in executive charge of a Superintendent, nominated by the General Manager for the President's appointment. His office is at Trenton, N. J., and his field of operation covers the lines owned, leased or operated by the Company east of Pittsburgh and Erie, including the Northern Central Railway, the Philadelphia, Wilmington and Baltimore, and the Camden and Atlantic and West Jersey Railroads. He is assisted by an Assistant Superintendent and a Chief Medical Examiner.

John Alexander Anderson, Superintendent of the Relief Department, was born on June 6, 1829, and on July 3, 1848, when nineteen years of age, entered the railway service as rodman in the Engineer Corps under Ashbel Welch, Chief Engineer, and Martin

Coryell, Principal Assistant, then locating the Belvidere-Delaware Railroad. He occupied various positions on that road up to the position of Assistant Superintendent until July 1, 1870, when he was promoted to the Superintendency, which he held until April, 1872, when he was appointed Superintendent of same road as the Belvidere Division of the Pennsylvania Railroad system. From September 1, 1881, that Division also included the Delaware and Raritan Canal. On January 25, 1886, he was appointed Superintendent of the Relief Department. His organizing abilities, the benevolent trend of his mind, his sterling character, and his inflexible integrity, peculiarly fitting him for the position, has made his Department a great success.

Holmes Davis Ely, Assistant Superintendent of the Relief Department, was born in Bucks County, Pa., March 11, 1845. He removed to Ohio in 1857, where, at the age of thirteen, he entered the railway service as station agent at McArthur, now McArthur Junction, on the then Marietta and Cincinnati Railroad, now the Baltimore and Ohio Southwestern Railroad. Owing to the death of his father the family returned East in the spring of 1858, Mr. Ely resigning his position to accompany them. Subsequently, and while a student at the Carversville, Pa., Institute, he was, at the age of sixteen, appointed to the position of shop clerk at the Lambertville Shops of the Belvidere, Delaware and Flemington Railroads, now a part of the Belvidere Division. He entered upon that service July 1, 1861, and his railroad service has been continuous since. After being shop clerk for about two years he was promoted to the position of bookkeeper in the Superintendent's office, where, prior to the lease of that road to the Pennsylvania Railroad Company, the accounts were kept. During part of the time that he occupied the position of bookkeeper he acted as extra passenger conductor and as extra telegraph operator in the Superintendent's office. The lease of the road to the Pennsylvania Railroad was made in the spring of 1872. Just prior to that event he was made General Accountant, and on the event Chief Clerk of the Belvidere Division, from which position he was promoted January 25, 1886, to the one he now occupies.

Samuel Whitehill Latta, M.D., Chief Medical Examiner of the

Department, was born in Octoraro, Chester County, Pa., July 23, 1848, and educated at Parkesburg and Media Academies and Lafayette College. After finishing his studies in the latter he took a course in the Medical Department, University of Pennsylvania, graduating as M.D. at that institution on March 13, 1868. Eleven days afterward, or on March 24, 1868, he was commissioned an Assistant Surgeon in the United States Navy, serving as such in the West Indies, South America, Africa, China and Japan. He was surgeon in charge of the landing forces in the Korean Expedition of 1871 under Rear Admiral Rodgers. He resigned from the navy on July 1, 1879. He served in 1879 and 1880 as Surgeon and Purser on the Steamship *Nederland* of the Red Star Line. From January 1, 1884, to January 1, 1886, he was Resident Surgeon at Broad Street Station, at which latter date he was promoted to the position he now occupies.

Dr. Latta is a member of the State Board of Medical Examiners of Pennsylvania, Philadelphia County Medical Society, State Medical Society of Pennsylvania, and was one of its Vice Presidents in 1894, and a member of the American Public Health Association. He is a close student of all matters pertaining to his profession, and a very conscientious gatherer of vital statistics. Careful and methodical in all he does, and of excellent judgment, his decisions can be relied upon as having been arrived at by the most critical analysis.

THE SAVING FUND.

The Employees' Saving Fund was created for the purpose of providing a safe place for the employees to deposit such portion of their salaries or wages as they may desire, not exceeding \$100 per month, to draw 4 per cent. interest and to be withdrawn under liberal rules and regulations prescribed by the Board of Directors. The money and securities of the Fund are kept by the Treasurer in a special account under the direct supervision of the Finance Committee, and the Company makes itself responsible for the safe custody and repayment of all money deposited in the Fund. It is in charge of a Superintendent appointed by the President, and comes directly under the supervision of the First Vice President.

William Joyce Sewell, First Vice President and Executive Officer of the West Jersey and Seashore Railroad Company, is one of the most prominent men in this country, having won distinction in warfare, statesmanship and railroad management. He was born at Castlebar, County Mayo, Ireland, and came to this country at an early age. He engaged in mercantile pursuits until the outbreak of civil war, when he entered the army as a Captain in the 5th New Jersey Volunteers. He participated in almost all of the battles of the Army of the Potomac, from Bull Run to Appomattox, and was wounded both at Chancellorsville and Gettysburg. In the former battle he made the famous charge in command of the 2d New Jersey Brigade, captured nine stands of colors and recaptured the regimental standards of a New York regiment. For bravery on that occasion he was brevetted Brigadier-General, and was subsequently brevetted Major-General for gallant services throughout the war.

In October, 1865, he entered the service of the West Jersey Railroad in charge of its Camden terminus and rose step by step. He was appointed Superintendent of the West Jersey Railroad in 1867, and elected its Vice President on October 29, 1880. Was elected Vice President of the Camden and Atlantic Railroad March 7, 1883; President of the Camden and Philadelphia Steamboat Ferry Company December 30, 1892; President of West Jersey Ferry Company February 23, 1893; and Vice President Baltimore and Potomac Railroad Company January 15, 1892.

He was elected State Senator of Camden County in 1872, re-elected in 1875 and again in 1878, and was President of the Senate when his party was in power. General Sewell's service in the State Senate covered the period of the amendments to the New Jersey State Constitution, the resolution which created the commission to suggest the same having been introduced by him. He took a leading part in the construction and passage of all the general laws, including the railroad law, his vote being the casting one on the passage of the first railroad Municipal Tax Bill, and the present taxation clause, which brings the State such a large revenue, in the Municipal Corporation Act, was his suggestion. While yet a member of the Legislature he was elected to the United States Senate in 1881, as the successor of Theodore F. Randolph, and served

until the close of his term in 1887. In 1895 he was again elected to the United States Senate to succeed Hon J. R. McPherson. He was elected as a delegate to the Republican National Conventions of 1876, 1880, 1884, 1888, 1892, 1896, and on each occasion made chairman of his delegation. He was also appointed one of the National Commissioners for New Jersey of the World's Fair at Chicago. He was elected by Congress, upon the death of General McClellan, a member of the Board of Managers of the National Home for Disabled Volunteer Soldiers, of which he is now Vice President, as a recognition of his services and valor during the war, and nothing gives the General more pleasure than to serve the interests of the Boys in Blue and to care for their comfort at the National Home, which has been established by the Government for those who cannot maintain themselves. He is in command of the 2d Brigade of the National Guard of the State, and connected with the management of various banks, trust companies and philanthropic societies.

Upon the declaration of war with Spain, President McKinley appointed him a Major General of Volunteers ; but the position being deemed incompatible with that of United States Senator, and his services in a legislative capacity of the greatest value to the Government, he sacrificed inclination to duty and declined the appointment.

He has always had the courage of his convictions, and has never swerved in performing his duty as a citizen and statesman, never faltering when everything seemed dark, keeping continuously in the front, receiving hard knocks, but never driven from the field, always striving for success and to grasp victory from defeat. Few people are aware of the struggles by which he has mounted step by step to his present position, and his career shows what may be accomplished by a strong, resolute man, whose course has always been guided by the principles of honesty and justice, who has the true altruistic desire to serve the people, and the doing of that which is right and for the best interests of all. His life has been marked by loyalty to truth and principle, the upholding of the interest and welfare of the public to the detriment of personal advantage by social usefulness and works of charity and kindness. Such men



make the State ; they are its safeguards in danger, and its trusted counsellors shaping its course and policy to their true and legitimate end.

A. O. Dayton, the Superintendent of the West Jersey and Seashore Railroad, was born March 1, 1851, at Washington, D. C., and entered the railroad service October 10, 1874, as machinist and draughtsman in Altoona shops. He was appointed Assistant Road Foreman of Engines, Pittsburgh Division, May 4, 1875 ; Assistant Engineer of Tests at Altoona, June 1, 1879, Superintendent of Motive Power, Northern Central Railway, at Baltimore, December 1, 1881 ; Superintendent of Motive Power, Philadelphia and Erie Railroad and Northern Central Railway at Williamsport, June 1, 1882 ; Superintendent West Jersey and Camden and Atlantic Railroads, May 1, 1885 ; and General Superintendent of Camden and Philadelphia Steamboat Ferry and West Jersey Ferry, April 1, 1890.

James Hitchcock Nichol, Assistant Engineer West Jersey and Camden and Atlantic Railroads, was born in Philadelphia, November 29, 1852. He was educated at the Philadelphia High School with a supplementary course in railroad engineering from Professor Joseph R. Wilson of that institution. June to November, 1870, was engaged on location and construction of the New Orleans and Selma Railroad ; January, 1871, to December, 1879, employed as Civil Engineer, United States Navy Yard, League Island, Philadelphia ; December, 1879, to March, 1880, served as Assistant Engineer, New Haven and Northampton Railroad ; and in March, 1880, entered the office of Principal Assistant Engineer, Pennsylvania Railroad, Altoona, which he left to accept the following appointments and promotions :

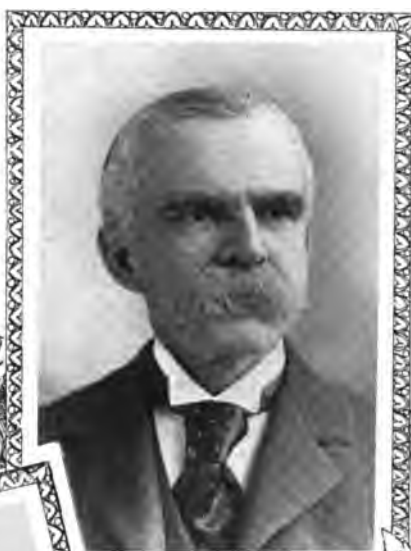
March, 1881, Assistant Supervisor, Lewistown Division, Pennsylvania Railroad. August, 1881, Assistant Supervisor, Middle Division, Pennsylvania Railroad, Harrisburg. April, 1884, Supervisor, West Jersey Railroad, Millville. May, 1886, Supervisor, West Jersey Railroad, Woodbury. March, 1891, Assistant Engineer, West Jersey and Camden and Atlantic Railroads, Camden.

Joseph Crawford, General Agent at Washington, D. C., was born in Luzerne County, Pennsylvania, in 1845, and entered the service

as a clerk in the Freight Office at Williamsport, Pa., in 1863. In February, 1866, he was promoted to the Freight Agency at that point, and served in that capacity until March, 1868. In May, 1868, he assumed position of Maintenance of Way Clerk, Eastern Division, Philadelphia and Erie Railroad, and filled it with ability until March, 1873, when he was promoted to the Chief Clerkship of the Superintendent's office, Eastern Division, only relinquishing that position in June, 1878, to take that of Superintendent, Sunbury Division, which he held until December, 1880. At this latter time he was transferred to Camden as Superintendent, West Jersey Railroad. In June, 1885, he was appointed Superintendent of the New York Division, which position he held until June 17, 1895, when, in the interest of his health, which had been impaired, he took an indefinite leave of absence. On April 15, 1896, having recovered, he was appointed General Agent at Washington, D. C., and took up again with vigor his railroad work. Mr. Crawford's exceptional training in the Commercial, Maintenance of Way and conducting Transportation Departments has made him a leading transportation officer.

William Hasell Wilson, President of the Belvidere-Delaware Railroad Company, was born at Charleston, South Carolina, on Tuesday, November 5, 1811, and came of distinguished lineage. His great-grandfather was an architect at Sterling, Scotland, and his grandfather an engineer of distinction and a British officer during the Revolutionary War. He is the son of Major John Wilson and Elizabeth Gibbes, his wife. The father was eminent as an engineer and surveyor, and served this country as an engineer officer during the second war with Great Britain, and was one of the prominent engineers who were engaged at an early day in railroad construction. The mother was a daughter of Captain William Allston, of Marion's Brigade, during the Revolutionary War, and a half sister of Washington Allston, painter and poet.

He received an English and classical education at Charleston, S. C., Morristown, N. J., and Philadelphia. In the latter city he entered the high school of the Franklin Institute, which was conducted on the Lancasterian plan. In accordance with that system, which provided for the teaching of the younger pupils by the more



FRANK J. FIRTH



JOSEPH CRAWFORD



W. HASSELL WILSON

advanced ones, Mr. Wilson took position in the school as one of the tutors. He left the school in June, 1827, to join as a volunteer the Engineer Corps which his father had organized under the auspices of the State for canal and railroad surveys through Chester and Lancaster Counties. When the surveys closed in the autumn of that year he resumed at Philadelphia his studies, devoting his time principally to drawing and mathematics. In March, 1828, he joined a corps of engineers engaged in locating the Philadelphia and Columbia Railroad as rodman. In 1829 he became Assistant Engineer in charge of construction of the twenty miles of road under contract in the eastern section, and continued in that position until April, 1831, when he was promoted to be Principal Assistant Engineer in charge of construction of the full eastern section of forty miles. In October, 1834, the road being completed, the Engineer Corps was disbanded, and he engaged in varied engineering pursuits. Until 1839 he was vicariously engaged in making surveys of a proposed line from Downingtown to Reading; as Principal Assistant Engineer in the service of the Philadelphia and Reading Railroad Company, in the final location and construction of the second division of its road from near Pottstown to Bridgeport, and in acting as Chief Engineer of the Gettysburg Extension. Depressed conditions of business and financial affairs checking the progress of public improvements, Mr. Wilson turned his attention to farming, in which he became deeply interested, continuing its pursuit from 1841 to 1852. Returning to his profession, he made during the summers of 1852 and 1853 extensive surveys for the Pennsylvania Railroad Company, and located a line of railroad from Philadelphia via Phoenixville and the French Creek and Conestoga Valleys, to a point on the Harrisburg and Lancaster Railroad about eight miles west of Lancaster. This line was projected for the purpose of having a through line from Philadelphia to Pittsburgh, and avoiding the State's road. In 1854 and 1855 he was Chief Engineer of the West Chester and Philadelphia Railroad. In January, 1856, he entered the service of the Pennsylvania Railroad Company, subsequently making for it a survey for a railroad between the Delaware and Schuylkill Rivers, through the southern part of Philadelphia, and two trips to Ohio, Indiana and Illinois, investi-

gating in its interests railroad matters in those States. On the 1st of August, 1857, he entered upon his duties as Resident Engineer of the Philadelphia and Columbia Railroad. He began reconstruction at once, and did a large amount of work before the 1st of January, 1858, in placing the road in condition to move over it the heavy trade that was offering. Among the many changes he made during that time was the re-laying of 6350 feet of south track west of Dillerville with entirely new rail. This section was the last remnant of the edge rail track put down in 1834. During 1858 his jurisdiction as Resident Engineer was extended to Mifflin, and on the 1st of January, 1859, it was still further extended to cover the entire line, and branches between Philadelphia and Pittsburgh, with headquarters at Altoona. The duties of the Resident Engineer at that time included the care of roadway, bridges and buildings, the designing and supervision of all new constructions, branch line surveys, purchase and management of real estate, furnishing of fuel and water for the motive power, as well as the purchasing of all materials for the repair and construction of the works under his charge. His title was changed to Chief Engineer in 1862. He was assisted by an Engineer of Bridges and Buildings, and a Resident Engineer on each of the Philadelphia, Middle and Pittsburgh Divisions. The large amount of work centering in the office of the Resident Engineer soon required a reorganization of that Department, and on January 1, 1868, Mr. Wilson was made Chief Engineer of Construction, with headquarters at Philadelphia, and his son, John A. Wilson, was appointed Chief Engineer, Maintenance of Way, and stationed at Altoona. From that date until the financial panic of 1873 put a stop to all betterments and additions, Mr. Wilson was busily engaged in providing increased facilities for the growing business of the Company, among which were embraced new car shops, freight, passenger, water and coaling stations, piers and coal chutes at Greenwich, and improving the line of the Philadelphia Division by straightening several miles of it. He was elected President of the Philadelphia and Erie Railroad Company in November, 1873, continuing at the same time as Consulting Engineer of the Pennsylvania Railroad Company. In July, 1874, having been placed at the head of the Real Estate Depart-

ment of the Pennsylvania Railroad Company, he resigned the Philadelphia and Erie Presidency, but retained his title as Consulting Engineer of the Pennsylvania. The arranging and systematizing the business of the Department involved a large amount of detail, patient, plodding work, and constant and close attention. In March, 1884, Mr. Wilson, having been elected President of the Philadelphia and Erie, the Belvidere-Delaware, the Philadelphia and Trenton, and some other railroad companies controlled by the Pennsylvania Railroad Company, retired from the Real Estate Department.

In 1894 he resigned all positions other than the Presidency of the Belvidere-Delaware Railroad Company and its subsidiary companies, which position he still holds (1898).

Frank J. Firth, the President of the Erie and Western Transportation Company, is the son of the late Major Thomas T. Firth, so long the Secretary, and then Treasurer, of the Pennsylvania Railroad Company. He was born in Philadelphia, Pa., on the first of October, 1842. After a proper course of study he was graduated in June, 1860, from the Philadelphia Polytechnic College as Civil Engineer. Although not yet eighteen years of age, he was engaged as an Engineer in July, 1860, on location of the East Brandywine and Waynesburg Railroad, which connected with the Pennsylvania Railroad at Downingtown. He continued in that employment until the completion of the work, late in 1861. He was then employed as Assistant Engineer in charge of location of the Philadelphia and Erie Railroad, with headquarters at Buena Vista, now Wilcox. Subsequently he removed to Swamp Lodge, an engineers' camp in the woods beyond the present location of Kane, and took charge of the construction of Summit Division of Philadelphia and Erie Railroad. Whilst there he made the topographical survey and map on which the shops and town of Kane were located. Those positions he held from March, 1862, until April, 1863. At the latter date accepted the position of Engineer of Shops at Renovo. In September, 1864, Mr. Firth went to Williamsport as Assistant Superintendent, Philadelphia and Erie Railroad, and continued as such until July 1, 1865, when he resigned to accept the position of Auditor of the Empire Line. On January

1, 1868, the Auditorship of the Erie and Western Transportation Company was added to his duties. April 1, 1872, he was appointed Vice President of the latter Company, retaining his post as Auditor, Empire Line. April 1, 1873, appointed Vice President of the Empire Transportation Company. The properties of that Company having been sold to the Pennsylvania Railroad Company, and the corporation having been dissolved, Mr. Firth, on October 1, 1877, became temporarily General Manager of Empire Line for the purchaser, holding at the same time the Vice Presidency of the Erie and Western Transportation Company. January 1, 1879, he resigned as Manager, Empire Line, and on June 1, 1881, became President of the Erie and Western Transportation Company, a position he has continued to fill with great credit and ability.

David McCargo, General Superintendent of the Allegheny Valley Railway, was born at Pittsburgh, Pa., June 6, 1835. In 1849, when a lad, he entered the telegraph office as a messenger boy, having for his associates Robert Pitcairn, H. W. Oliver and Andrew Carnegie, all of whom, like himself, have left their imprint upon the times in which they lived as men who rose step by step from the most modest beginnings to positions of great responsibilities and usefulness.

Mr. McCargo, having soon mastered the mysteries of telegraphy, was promoted to be an operator. He continued his connection with commercial telegraphy until April 1, 1859, when he was appointed Superintendent of the Telegraph Lines of the Pennsylvania Railroad Company. He subsequently became Assistant Superintendent of the Pittsburgh Division, Pennsylvania Railroad Company. In 1865 he was appointed Superintendent of the Oil Creek Railroad, and in 1866 Superintendent of the Milwaukee and Minnesota Railroad and the Horicon Division of the Milwaukee and St. Paul Railway. In 1867 he returned to the telegraph service as General Superintendent of the Pacific and Atlantic Telegraph Company.

The Pacific and Atlantic Telegraph Company was organized solely as a Company, its stock resting in the hands of active business men and free users of telegraph facilities. The success that is achieved in revolutionizing telegraphic methods and economies, and



DAVID McCARGO



T. F. BROWN



T. R. ROBINSON



E. P. BATES

in breaking down the press monopoly, was largely due to Mr. McCargo's able and energetic management. It was he that introduced the system of night messages by which wires that were comparatively idle after four o'clock in the afternoon were brought into further use. It was also on this line, between Philadelphia and Pittsburgh, that the "screw glass insulator" was first brought into use. Mr. McCargo, after interviewing most of the glass manufacturers in Pittsburgh for the purpose of having them make that form of insulator, and meeting with the uniform opinion that it would be impossible to get the screw on the inside of the glass, at last, after persistent effort, secured an ingenious glass-blower to make the experiment, and achieved success.

He served with the Pacific and Atlantic Telegraph Company until 1874, when he re-entered the railroad business, and for two years held the position of Vice President and Receiver of the Oil Creek and Allegheny River Railroad Company, reorganized as the Pittsburgh, Titusville and Buffalo Railroad Company. Since July 1, 1875, he has been the General Superintendent of the Allegheny Valley.

Mr. McCargo is a thorough-going man, a hard worker, who never slightes the most minute detail; genial in manners, kindly in disposition, and pure in character. He is universally esteemed for his ability and worth.

Thomas R. Robinson, the Treasurer of the Allegheny Valley Railway Company, was born at Pittsburgh, Pa., June 17, 1847. His early education was received in the public schools of that city and at the Western University of Pennsylvania. Upon being graduated from the latter, he engaged as grocery clerk, in which occupation he continued until he reached his majority in 1868, when he entered the service of the Pacific and Atlantic Telegraph Company, first as clerk, and afterwards as Secretary and Treasurer. In 1874 he left that Company and became connected with the Oil Creek and Allegheny River Railway Company, and since 1875 has occupied his present position.

Theodore F. Brown, the Auditor of the Allegheny Valley Railway Company, has been in continuous service on auxiliary lines in the Pennsylvania Railroad Company's system since October 1,

1862, having entered upon it through the line of civil engineering as rodman in construction work on the Pittsburgh and Steubenville Railroad, a line which now forms a part of the main line of the Pittsburgh, Cincinnati, Chicago and St. Louis Railway. Promoted to be Assistant Engineer, he remained on that work until April 1, 1865, when he took position with the Oil Creek and Allegheny River, afterwards the Pittsburgh, Titusville and Buffalo Railway Company, as Chief Clerk in the Accounting Department. On July 1, 1874, he was promoted to be Auditor in the Department, the duties of which he performed with great fidelity until September 1, 1878, when he entered the service of the Allegheny Valley Railroad Company as Chief Clerk in its Accounting Department. He was appointed Auditor July 1, 1880, in which position he continued with the Allegheny Valley Railroad, and, since its reorganization, with its successor, the Allegheny Valley Railway Company.

Mr. Brown was born at West Chester, Pa., August 29, 1845, and began his railroad career in April, 1860, as rodman in an Engineer Corps engaged in locating the Oxford and Peach Bottom Railway. In 1861, some time after the breaking out of the Civil War, he left that employ and entered the Engineers' Department of the United States Military Railroads in Virginia, remaining there until October 15, 1862, when he resigned to accept position as before noted.

Edwin P. Bates, the General Freight Agent of the Allegheny Valley Railway Company, was born September 19, 1861, in Allegheny County, Pa. Mr. Bates began his railroad service in the twenty-first year of his age. In March, 1882, he engaged as clerk in the Assistant General Freight Agent's office of the Pennsylvania Company. His connection with that office continued until January 1, 1884, when he was transferred to the office of the Division Freight Agent, Pennsylvania Railroad Company, at Pittsburgh, where he served as clerk until September 1st of the same year, when he entered the service of the Allegheny Valley Railroad Company as clerk in its General Freight Agent's office. On May 1, 1886, he was promoted to be Chief Clerk; November 1, 1887, Special Agent; and February 1, 1891, to be General Freight Agent. On February 2, 1892, upon the reorganization of the

Company as the Allegheny Valley Railway Company, he was re-appointed General Freight Agent.

Frank M. Ashmead, Resident Engineer, was born in Philadelphia, February 23, 1853. After the death of his father he removed, about 1856, to Germantown, and lived there until 1870, with the exception of one year's residence in Middletown, Conn., at which place he attended his first primary school. In Germantown he attended two primary schools; then the Friends' school on Main street for three years; then the Calvary Academy on Mannheim street for several years; then entered the Northwest Public School in Philadelphia, from which he entered the Philadelphia High School, remaining there two years; and lastly, spent two years at Philadelphia Polytechnic College. In the spring of 1870 entered the service of the Dutchess and Columbia Railroad, Oliver W. Barnes, Chief Engineer, Millerton, N. Y., remaining until the completion of the road. In 1871 was with the Columbia and Port Deposit Railroad, at Safe Harbor, as chainman on construction. In 1872 was at Caledonia as rodman on Bennett's Branch Railroad (now Low Grade Division, Allegheny Valley Railway). He remained two years on construction as rodman, later as levelman, and still later as Assistant Engineer. In 1874 and 1875 he was stationed at East Brady, on surveys, Oil Belt Pipe Lines, etc., Butler and Clarion Counties, Pa. From 1875 to 1878 was Resident Engineer with Oil Creek and Allegheny River Railroad. From the latter date he has been connected with the Allegheny Valley Railway, first as draughtsman in Department of Bridges and Buildings, with occasional service in the field under the Chief Engineer. He went to Pittsburgh in 1884 as Resident Engineer, and later, upon the death in 1890 of Mr. E. Lewis, assumed the duties of the Superintendent of Bridges and Buildings.

James P. Anderson, the General Passenger Agent of the Allegheny Valley Railway Company, was born in Beaver, Pa., August 29, 1862. His earlier school days were passed at the Beaver College, and later, when the family came to Allegheny City, Pa., in 1871, he became a pupil in the Fourth Ward School of that city, where Professor Morrow was principal. On July 3, 1880, he entered the Passenger Department of the Allegheny Valley Railway

as clerk, and after filling different positions was promoted in September, 1886, to be Chief Clerk of the Department. On May 16, 1889, he was further promoted to the position which he now fills with signal ability.

Charles B. Price, Superintendent of the River Division, was born March 15, 1851, at Philadelphia, Pa. He entered railroad service October 19, 1869, as clerk in the office of Mr. John Pitcairn, General Manager Oil Creek and Allegheny River Railway (now the Western New York and Pennsylvania Railway), at Corry, Pa. Was transferred to the Engineer Corps in October, 1870, serving as rodman under Chief Engineer Walter F. Patterson. Was appointed Freight and Ticket Agent at Hickory in August, 1871, remaining there but a short time until transferred to the position of Chief Clerk in the office of Superintendent C. J. Hepburn at Corry. Upon the Allegheny Valley Railroad acquiring control of the Oil Creek and Allegheny River Railway, was promoted in November, 1872, to the position of Chief Clerk in the office of General Superintendent. Was appointed Car Accountant of Allegheny Valley Railroad in June, 1880, and Superintendent of the River Division to succeed Thomas M. King, resigned, on June 1, 1881. Was elected President of the American Society of Railroad Superintendents in October, 1895, and still holds that position.

Spencer B. Rumsey, Superintendent of Low Grade Division, was born in Fitchville, Huron County, Ohio, March 12, 1846. Removed to Wisconsin in childhood. He was educated in the village district school at Hartford in that State. On April 7, 1862, when he was sixteen years of age, he was bound to Alonzo W. Bellows, station agent and telegraph operator at Hartford (Milwaukee and St. Paul Railway Company), for one year, doing chores for his board and acting as messenger boy at the station, for the privilege of learning telegraphy. At the end of eleven months, March 23, 1863, the agent releasing him, he entered the service of the Milwaukee and St. Paul Railway Company as telegraph operator at Sparta, Wisconsin. At the expiration of three months, September 1, he was transferred and became a telegraph operator in the Superintendent's office at Milwaukee. On August 21, 1864, entered United States Military Telegraph Corps, Department of the



F. M. ASHMEAD



J. P. ANDERSON



C. B. PRICE



S. B. RUMSEY

Cumberland, and assigned to duty on the staff of Maj. Gen. Judson Kirkpatrick, then in the vicinity of Atlanta, Georgia. Was next sent to General Sherman's headquarters in Atlanta, and worked as telegraph operator until that army started on its march through Georgia, when he was ordered to report for duty on the Military Field Telegraph Line in front of Nashville, Tenn. Resigned from the military service October 31, 1865. Then entered the service of the Milwaukee and Minnesota Railroad as telegraph operator and clerk to David McCargo, Superintendent. On January 1, 1868, became Manager of the Pacific and Atlantic Telegraph Company's office in Philadelphia; promoted to Superintendent of Eastern Division of that Company May 10, 1873, and held that position until the Western Union Telegraph Company leased the line on December 31, 1873. Became Special Agent of the Oil Creek and Allegheny River, and Buffalo, Corry and Pittsburgh Railways, April 1, 1875. He entered the service of the Allegheny Valley Railroad, September 1, 1875, as Special Agent, but acted jointly as Special Agent of the two roads mentioned until September 1, 1878. Continued as Special Agent of the Allegheny Valley Railroad until appointed Superintendent of the Low Grade Division of that line, January 14, 1887.

Harrison D. Mason, Purchasing Agent, was born January 27, 1855, in Allegheny City, Pennsylvania. He first attended school at First Ward Public Schools, Allegheny; later at Cosgrave's Private School, Ridge Avenue, Allegheny; and still later at Newell Institute, Penn Avenue, Pittsburgh—James R. Newell, Principal. He left school during the summer of 1872, and shortly after entered the service of the Pennsylvania Railroad under Cass A. Carpenter, Freight Agent, Duquesne Freight Station, Pittsburgh, remaining there for several years, filling various clerkships in the office and on the freight platform. By reason of a long and serious illness in 1875 he was compelled to relinquish his position. Shortly after his recovery he became bookkeeper for the firm of Hamilton, Arnold & Co., coffin manufacturers, in Allegheny City, where he remained until 1880. He entered the service of the Allegheny Valley Railroad December 8, 1880, as junior clerk in the General Superintendent's office, becoming Chief Clerk in June,

1881. Was appointed Purchasing Clerk in September, 1885, in addition to his duties as Chief Clerk. On May 1, 1892, he received his present title of Purchasing Agent.

William F. Rupp, Car Accountant, was born in Kittanning, Armstrong County, Pa., December 29, 1865. He attended the public schools of the town and was graduated from its High School in 1883. In 1877, when eleven years old, in addition to attending school, he was assistant toll-keeper at Kittanning Bridge, relieving the regular toll-keeper. He remained there until 1884, and took a post-graduate course of one year at High School. On December 1, 1884, he entered Kittanning telegraph office as a student of telegraphy. In three months' time he became sufficiently proficient to take charge of Kittanning night office. He subsequently worked as extra operator, clerk and agent on River Division, mostly at Kennerdell Scales, where all the coal going north was weighed. On January 10, 1887, he was placed in charge of "FA" office at Oil City, where all telegraph business via Western New York and Pennsylvania Railroad, between Buffalo and Pittsburgh, was transferred. At this time the business was very heavy, often amounting to 160 relay messages per day, in addition to 10 or 15 local messages. In November of same year he was appointed agent at Kelly, Pa. In February, 1888, was transferred to the telegraph office at West Penn Junction, operating signal blocks and West Penn Railroad wires. On November 19, 1889, was appointed Timekeeper in office of Superintendent, River Division, and on February 25, 1891, was appointed Car Accountant.

H. E. Bradley, the oldest Supervisor in the Company's employ was born May 16, 1833, in the town of North Haven, New Haven County, Conn. He comes of an old Puritan family, with an interesting history. He was educated in the common schools, and spent his youth on his father's farm. He was employed on New Haven, Hartford and Springfield Railroad, and New London and Shore Line Railroad between the years 1858 and 1862. In August, 1862, he joined the 15th Connecticut Volunteers, and was detailed into Quartermaster's Department at Acting Brigadier General D. R. Wright's headquarters and afterwards at General Getty's. In the summer of 1863 he had charge of the docks at



H. D. MASON



W. T. RUPP



H. E. BRADLEY



W. REYNOLDS

Portsmouth, Va., and received and distributed all the forage used by Getty's command. He was honorably discharged from the service in November, 1863, on account of sickness. After his recovery, he was employed in the construction of Fort Hale, New Haven Harbor. In October, 1867, he went to Pittsburgh, Pa., and on December 1st, following, entered the service of the Allegheny Valley Railroad as section foreman, and on January 9, 1868, was promoted Supervisor of the upper end of that road.

Withington Reynolds, Agent at Kittanning, one of the oldest and most efficient employees of the Company, was born at Greenville, Clarion County, Pa., on March 10, 1844. His family removed to Allegheny City, Pa., in 1849, where he attended the Second and Fourth Ward Public Schools. His father was a steamboat captain, and he spent much of his time on the river until his seventeenth year. At the breaking out of the war, he was a clerk at Cowanshannoc, Pa., in a store connected with an iron furnace; and from there went to Kittanning to fill a clerkship under W. H. H. Piper, Express Agent. There he assumed control of three stage line companies running between Brady's Bend, Brookville and Clarion. In 1866 he entered the service of the Allegheny Valley Railroad as Ticket and Freight Agent at Kittanning, and he has served continuously up to the present time at that station. Mr. Reynolds not only has developed the business methods of his station and advanced the interests of the Company, but he devoted his spare hours to self-culture, and his pen commands a wide field of descriptive power.

David Homer Bates was born in Steubenville, Ohio, July 3, 1843. Early in life he removed to Pittsburgh, where, at the outer depot, on March 11, 1859, he entered the service of the Pennsylvania Railroad Company as a messenger. Acquiring a knowledge of telegraphy, he became in August of the same year operator at that depot, and was afterwards promoted to the office in the passenger station. He remained at the latter point until the spring of 1860, when he was advanced to operator in the General Superintendent's office at Altoona. From this latter point he was sent to Washington. On his arrival there on April 25, 1861, he was assigned to telegraphic duty at the Navy Yard with Captain, after-

wards Admiral Dahlgren, and after remaining there for two weeks was ordered to Annapolis Junction, which point he in turn left on May 22, 1861, to assume position as a Military Telegrapher in the War Department, where he remained until the close of the war, performing steadfastly all the duties laid upon him, winning the utmost confidence of the Administration of the Government, and unconsciously making a desirable reputation for himself. About the beginning of 1862 he was appointed Cipher Operator, and in May, 1862, Chief Operator in the Department. Major Eckert had at that time become Manager of the Military Telegraphs, and Mr. Bates was his close and confidential assistant, although not formally given the title until June, 1865. A young man of his years whose character is so thoroughly formed is rarely met with. Studious, energetic and positive; actuated in all his actions by high moral reasoning, he was as indifferent to the applause of his friends as to the ill-natured criticisms of foes, and the logical consequence was success crowned all his undertakings. With truth, justice and right stamped upon his open, manly brow, he entered the perilous mazes of the political metropolis when the demoralizing tendencies of war were exerting their baleful influences upon the destinies of thousands of young men, and by the moral forces of his character maintained his purity.

In August, 1866, Mr. Bates was appointed Manager of the Western Union Telegraph Office in Washington, D. C. In August, 1867, was promoted to be Superintendent of the 8th District, Eastern Division, Western Union Telegraph Company, succeeding David Brooks at Philadelphia. In May, 1875, he became General Superintendent, Atlantic Division, Atlantic and Pacific Telegraph Company. In May, 1879, was elected President of the American Union Telegraph Company, continuing as such until January, 1880, when, General Eckert having assumed the Presidency, he accepted the First Vice Presidency. He became Assistant to the General Manager of the Western Union Telegraph Company in February, 1881, and Acting Vice President shortly afterwards. In 1882 he was selected as Vice President of the American Telegraph and Cable Company (Gould Cables), also as Vice President of the American District Telegraph Company, New



York City. From January 1, 1884, until October 15, 1887, he was President of the Baltimore and Ohio Telegraph Company. In April, 1888, he became Vice President, Electrical Accumulator Company, and in May, 1892, General Eastern Manager of the Bradstreet Company. On January 1, 1896, he was elected Vice President of the Tradesmen's National Bank of New York.

Science, invention, finance and trade have always commanded his services, because he started right and kept right.

Richard O'Brien was born in Waterford County, Ireland, December 30, 1839. His parents had been living in Philadelphia for some years, but meeting reverses by the failure of the United States Bank they had gone back to Ireland shortly before Richard's birth, but returned again in 1851.

Richard O'Brien began his telegraphic career in 1856 on the old State Road at Downingtown, from whence, in 1857, he was transferred to the President's office in Philadelphia. He served subsequently in various stations between Philadelphia and Pittsburgh, including the latter. Sometimes his duties were confined to those of an operator, and again they were combined with those of Station Agent. Steadily advancing in the esteem of all officials, he became Chief Operator of the Middle Division at Harrisburg upon the outbreak of the Civil War. Upon his arrival at Washington he was posted at the railroad station in that city, and at Annapolis Junction engaged in manipulating the wires and running trains under Colonel Scott's direction. In August, 1861, Mr. O'Brien was sent to Fort Monroe as Chief Operator in charge of Military Telegraph Lines in that Department. The construction and management of these lines and cables for military telegraph purposes kept him in active service at the front throughout the war. He was Chief Operator, Army of the James, in 1864, and Chief Operator, Department of North Carolina, in the final campaign when Sherman swept up from the South. His intense patriotism caused him to render efficient service in aid of military operations, for which he received the thanks of the various Generals and the Department of War. Since the war he has occupied the responsible position of Superintendent of Telegraph, and now represents the Western Union Telegraph Company in that position at Scranton, Pa. He was projector of

the Central Pennsylvania Telephone Company, one of the most successful corporations in that line in this country, and is still its Vice President.

Richard O'Brien has won respect and admiration for himself by the predominating qualities of his character. Brains, courage, intelligent devotion to duty and unswerving truth and honor always shaped his course. Gifted by nature with a speaking countenance and a voice of pleasant timbre, and having combined throughout life an extraordinary capacity for work, with genial manners and wise helpfulness of others, he presents a rare and admirable character for emulation. Mr. O'Brien has had a great many young men under him both in military and civil life, and it is perfectly safe to say that his influence upon the character of every one of them has been highly beneficial, whether in uplifting the discouraged and unfortunate, or in inspiring and directing honorable ambition in the more fortunate. This beneficent influence has been largely exerted through the example of his honorable and energetic character.

William Bender Wilson, the author of this work, was born in Harrisburg, Pa., April 5, 1839; educated in the public schools of that city, with a term or two in the Harrisburg Academy, served as junior clerk in the dry goods house of James S. Epsy, for two years. At fourteen years of age he entered the service of the Atlantic and Ohio Telegraph Company as messenger, became an operator in 1854, and on the 8th of October, 1855, entered the service of the Pennsylvania Railroad Company. Served as operator in Harrisburg station, then transferred to Wilmore, Irwin, Altoona, Huntingdon and Columbia, serving in latter place during 1856 and part of 1857. In August, 1857, he returned to Harrisburg, and was subsequently transferred to Thirteenth and Market streets, President's office, and in Atlantic and Ohio office, Philadelphia, working interchangeably in those offices, with emergency work at Gap, Lancaster and Cresson, until July, 1860, when he went South. He returned on the outbreak of the war, and entered Superintendent Young's office, Harrisburg. From there he was taken by Thomas A. Scott on April 17, 1861, to Governor Curtin's office at Harrisburg, where with a relay magnet and a key placed on a window sill, he opened the first military telegraph office on this continent.

After organizing the telegraphic service at Harrisburg, he joined Colonel Scott in Washington on the 3d of May, and became Manager of the Military Telegraph Office in the War Department, from which vantage ground many of the innermost secrets and actions of the administration of public affairs, both civil and military, became known to him. Mr. Lincoln was a constant visitor to the office both during the hours of the day and night, keeping the finger of one hand on the pulse of the country, whilst with the forefinger of the other he pointed out the roads for the army to take. Mr. Wilson saw him on many occasions when the skies were overcast and many friends of the country were yielding to despair. He was with him at the time the "Harriet Lane" ran the enemy's batteries on the lower Potomac, during the first battle of Bull Run, the disaster at Ball's Bluff, the capture of Mason and Slidell, and other trying periods in those days of blood. One of the most trying was on Sunday, the 9th of March, 1862. News of the rebel ram "Merrimac" having come out of the James River, sunk the "Cumberland," burnt the "Congress," and grounded the "Minnesota," "St. Lawrence" and "Roanoke," reached Washington via boat from Fortress Monroe to Cape Charles, thence by wire. In person he apprised the President and Secretary of the Navy Welles of the disaster. Immediately they came to the War Department Telegraph Office, which was then located on the entresol off the landing separating two flights of stairs between the first and second stories in the old War Department building. It was an anxious morning. The supposition was that the victorious "Merrimac," having nothing to oppose it, would reduce Fortress Monroe, make its way up the Potomac, and bombard Washington. Captain Dahlgren, then Commandant at the Navy Yard, was sent for and brought into consultation. He advised loading canal boats with stone and sinking them in the shallowest part of the Potomac channel, which was at Cuttle Fish Shoals. His suggestions were being carried into execution when the glorious achievement of the "Monitor" was flashed over the wires, relieving the tension and turning gloom into joy. Mr. Wilson says throughout that whole trying day, when the loss of the Capital seemed reasonably sure, Mr. Lincoln lost not a particle of faith in the cause and its ultimate

success, but remained the cool, clear-headed adviser he always was when the clouds were the darkest.

In the summer of 1862 Mr. Wilson returned to Harrisburg and resumed his position on the Pennsylvania Railroad as its General Lost Car Agent, carrying with him a testimonial of his services signed by Mr. Lincoln.

On the defeat of Pope under the walls of Washington, leaving Pennsylvania open to invasion, and the Pennsylvania Railroad liable to attack, Mr. Wilson re-entered the field, and with a pocket relay and a coil of fine helix wire for opening up telegraphic communication whenever convenient and practicable, joined Captain William J. Palmer (also a Pennsylvania Railroad man) in a scouting expedition down the Cumberland Valley, entering the enemy's lines, moving on his flanks, ascertaining his numbers, and reporting frequently to the authorities. His offices, as opened, were improvised from fence rails, tree stumps or crevices in decayed trees; from these, however, he was able to give the government officials the first information relative to the fall of Harper's Ferry, the fight at Boonsboro Pass of the South Mountain, and the evacuation of Hagerstown by Longstreet. The enemy threatened Greencastle, and the few troops there departed, leaving him with two scouts as the sole garrison. Taking position on a hand-car, with instrument in circuit and flying the American flag over the town, he bid defiance to the enemy, and from this unique office kept the authorities advised. The combination of Palmer and Wilson, according to McClure in "*Lincoln and Men of War Times*," was the medium of information which enabled Governor Curtin to guide McClellan's army in the Antietam campaign. In the Gettysburg campaign, Early's raid, and at the time Chambersburg was burned, he did service of a similar character. Frequently in the valley the enemy passed northward around him whilst he lay concealed in the woods, with instrument in circuit. He kept up communication by apparently tearing down the telegraph line for some distance, being careful, however, to keep it from contact with the ground, and running fine silk-covered wire through the grass to a hiding place among the trees.

Harrisburg was his headquarters, where he kept himself ready to

respond to all calls made upon him by Mr. Scott. The slightest dust raised by the enemy in the Shenandoah Valley would be met by an order for him to proceed to the Potomac. Many and many a time in the dark hours of the night he was awakened from sleep and ordered "down the valley," and taking a locomotive, made the echoes ring with its speedy run to Hagerstown. From there he would send out trusted scouts, and by daylight have Mr. Scott advised of the situation. Sometimes the enemy would drive him out of the town, and then would ensue an interesting race between an operator on a hand-car and a soldier on a horse, in which bullets, oaths, hopes and fears seemed to mix in great confusion.

Again, the enemy would appear before he could arrange his toilet for leaving, and he would be compelled to remain and enjoy their company as best he could, never forgetting, however, to make notes on his mental tablets of such things as would prove interesting to Colonel Scott. Once General Jenkins' cavalry drove him out of Mechanicsburg, and pursued him as long as the common road was close to the railroad, and whilst the bullets came uncomfortably near and imbedded themselves in the hand-car he passed on unharmed. On another occasion General Fitz Hugh Lee broke up his office, located in a fence corner about a mile north of Carlisle, causing him to withdraw into that ancient borough and enjoy, with General William F. Smith, the sensations of a bombardment. With the ground or a friendly hayrick for a couch, sleep impossible, hunger gnawing, danger of capture always imminent, and death ever present, the service was never an easy or agreeable one, and its performance was only sustained by the consciousness that it was right.

In March, 1865, he was appointed Superintendent Northern Central Railway Telegraph, Baltimore to Canandaigua. On September 1, 1866, appointed Chief Clerk in the Freight Department at Harrisburg; January 1, 1882, Freight Agent at Lancaster; March 24, 1884, Freight Agent of the Kensington District, and on July 7, 1892, Superintendent Mantua Transfer. Served four years in Harrisburg City Council; was candidate in 1873 for the Legislature in Dauphin and Perry Counties; for Congress in 1876 in the Fourteenth Pennsylvania District, and served for three years, 1894 to

was a gala day, and railroad official and invited guest brought enthusiasm to meet artistic display in greeting history as it unfolded its wonderful records of the Company's doings in connection with continental development during the period of a half century.

The Directors met in the President's Room at 11.45 A.M., and at 12 M. proceeded in a body to the Assembly Room on the fifth floor annex, which was already filled with the officials of the Operating Department, east and west of Pittsburgh and Erie, to the number of 250. Having entered the room, Mr. Charles E. Pugh, Third Vice President, called the meeting to order, and in a few well-chosen words, introduced Mr. George B. Roberts, the President of the Company. Mr. Roberts was received with the hearty and loyal greetings always accorded him by the employees of every grade. Addressing them, he said :

"Fellow-officers and fellow-employees of the Pennsylvania Railroad Company : This time marks the fiftieth mile-post not only in the lives of many of us who are here, but likewise in the life of your corporation. Its success up to the present time is, I firmly believe, wholly attributable to those whom I see around me, and to those who have not the privilege of being here to-day, as well as to the many who have preceded us, and to whom we can look back as of the same character as those around us, and who laid the foundation of the prosperity of this Company.

"It is wholly upon the character of its officers and employees that its future success must depend, and may we return thanks to an all-wise Providence who has permitted us to enjoy it thus far, and look forward to the hope that it may enjoy even greater prosperity hereafter.

"I am glad to have this opportunity to meet those whom I seldom have a chance to meet, and to add that my only regret is that I cannot welcome all the 100,000 employees in the service of the Company, both east and west of Pittsburgh, and to thank one and all of the officers of the Company charged with its management, to whom the shareholders are so much indebted for its success."

Those present then filed by, the President and the Board grasping each hand in congratulation. Mr. Roberts had a pleasant word for every one. He held firmly, even fondly, in his left hand a little

cloth bound volume which James Cullen, the oldest Supervisor in the Company's service, had presented him a few moments before. It was a well-preserved copy of the first book of rules and regulations of the Pennsylvania Railroad, together with a time-table issued in September, 1849, by Herman Haupt, then General Superintendent. President Roberts laid great store by this apparently simple souvenir, and said it was the only copy of the book that had ever come into his possession.

The President and Board withdrew as soon as the hand shaking was over, and the operating officers and guests proceeded to the dining room on the second floor, where they partook of luncheon.

The Board went immediately from the Assembly Room to the Board and President's rooms, where at 1 P.M. Mr. Roberts received large numbers of eminent men in all walks of life : Trade and commerce, theology and law, finance and science, education and transportation, statesmanship and medicine, architecture and manufacture, each and all sending their favored sons to commend the official representatives of the Pennsylvania Railroad Company for the important part that corporation had taken in the material advancement of city, State and nation in the last half of the Nineteenth Century. The East vied with the West, and the North struggled with the South in sending its most prominent men to be their representatives. New York, San Francisco, Chicago and St. Louis linked arms with Boston, New York, Baltimore and Washington, bowed and did their obeisance at the gates of Philadelphia. Judges of the Courts, United States Senators, Governors, Members of Congress, Mayors of cities, Presidents of Railroads, Bankers, Ship Builders, Representatives of Municipal Corporations, Iron Masters, Mechanics, Inventors, Importers, all signalized by their presence the unlimited importance of the occasion. Congratulations ruled the hour, and amidst the triumphs of Flora the assembled thousand partook of a sumptuous collation.

At 2.30 P.M. the Board left the General Office for the Academy of Music, and entering the Locust street stage door proceeded to the Green Room. The Academy began to fill up with the shareholders, officials, employees and invited guests, whilst the orchestra of sixty pieces, under the leadership of Charles M. Schmitz, dis-

coursed some more than ordinarily fine selections of music. The ability and perfection of performance as displayed by the orchestra on this occasion has never been excelled at the Academy.

At 3 o'clock, as the orchestra struck up the Grand March, President Roberts, linking arms with Governor Hastings and followed by the Board and other officials, moved from the rear to the front of the stage, a salvo of unequalled applause almost overwhelming them. Upon the subsidence of the applause Mr. Roberts and followers were seated. To his right were Governor Hastings, Mayor Warwick, City Solicitor of Pittsburgh Clarence Burleigh, Joseph H. Choate, of New York, Frederick Fraley, LL.D., Vice Presidents Frank Thomson, John P. Green and Charles E. Pugh, of the Pennsylvania Railroad Company, and Vice Presidents, James McCrea, J. Twing Brooks, J. E. Davidson and Joseph Wood, of the Pennsylvania Company ; on his left were Directors Alexander M. Fox, Alexander Biddle, N. Parker Shortridge, Henry D. Welsh, William L. Elkins, Clement A. Griscom, Benjamin B. Comegys, Amos R. Little, William H. Barnes, George Wood and C. Stuart Patterson. Mr. A. J. Cassatt, the one other Director to complete the Board, was absent in Europe.

Quiet having been secured, Mr. Roberts arose and delivered the opening address. His tones were clear and distinct, and as he stood there he seemed to symbolize in his manner, bearing and speech the power, strength and integrity of the Company, and to express in his personality the half century of progress that was being celebrated. His speech was listened to throughout with intense earnestness by the assemblage. He said :

“ Ladies and gentlemen, shareholders, officers and fellow-employees of the Pennsylvania Railroad Company :

“ We are this day to manifest the fact, and to give expression to it, that the corporation in which you are so largely interested is about passing the fiftieth mile-post in the life of its organization. In no better way can we judge of what we can do in the future than to take a retrospective view of what has taken place in the past. Those who are not willing to be guided by that which they have had an opportunity of seeing will seldom make a success of doing

and managing that which comes to them in the future. Therefore, without taking much of your time, I will briefly go over what has happened in the progress of your corporation since its first organization, April 13, 1846, until the present time. There are many, no doubt, here present, who are to-day officers or employees in the Company, in addition to those who are shareholders in it and form the Company, who were present at that day. They have lived with it; they have grown up with it, and to their untiring watchfulness has come to you what measure of prosperity you have. It is not from those whom you see around us, your Directors, your trustees, and the heads of the various departments, but it is to the rank and file; to the entire one hundred thousand men who are in your employ, and who so faithfully look after your interests, that whatever measure of prosperity you enjoy this day is to be attributed. They are not slaves, giving to you the measure of their labor by what you pay them; but they give to you all that is within them, no matter what their recompense may be. To the *esprit de corps* that is to be found in your employees and officers, if you will spare me in including myself in the list, is to be attributed what you have here for cause of congratulation. To look back upon the annals of this corporation is the best way, probably, to judge, not only of what has taken place in its progress, but largely of what has taken place in the progress of not only your State, but your nation. It measures the period of time which has been so fertile in everything that has promoted the growth, prosperity, and the comfort of those who now have the opportunity of enjoyment.

“When your corporation was organized in 1846, it had to spend the first few years of its life in starting out and gathering to it that measure of confidence which has never been taken away from it from that day to this, which enabled it to consummate in the year 1852 a final line of transportation in connection with the State Works between our own City of Philadelphia and the City of Pittsburgh, the Western metropolis of our State. At that time—1852—when it was first opened as a transportation line, it consisted of 224 miles of railroad, with a capital and debt of about \$12,000,000. The first year of its operation it carried not over 70,000 tons of freight, and transported about 500,000 passengers. From that day

to this its growth has been what? To-day it has obtained, by purchase, in the construction of lines and ownership directly in your corporation, the line from Philadelphia to Pittsburgh, measuring about 357 miles of railroad, which I beg you not to forget is the keystone of your entire system, as the State of Pennsylvania is the keystone of this country. The Pennsylvania Railroad Company authorized to build and construct and obtain by purchase or otherwise the completed line from Philadelphia to Pittsburgh, owns now and controls, or has owned or controlled, 256 corporations, which by consolidation and merger are to-day represented by 138 distinct companies, most all of them engaged in transportation enterprises, but some of them engaged in mining and manufacturing industries. It controls 9000 miles of railroad, either by lease or ownership, a length of line that is more than one-third the distance around the entire globe; and when you take the different tracks, side tracks and yard tracks it controls, you have a trackage that measures largely more than one single rail around the entire sphere.

"The aggregate capital of these corporations, which are owned and controlled by your corporation, is about \$834,000,000, and while your corporation moved in the year 1852 but 70,000 tons of freight—much less than it moves now in a day—the aggregate tonnage of the various corporations composing its entire system amounted to 160,000,000 tons in the past year, a tonnage which bears a fair proportion to the entire tonnage of all the transportation lines in the United States. It carried, with reasonable amount of safety and precision, 75,000,000 of passengers. In 1852 the total number of locomotives was about 50, and the entire number of cars owned by the corporation was not over 1000. To-day your system controls 3400 locomotives and 141,000 cars of all kinds, including 226 barges, steamboats and other craft used in connection with its lines upon the water. This equipment would give you a train of cars extending from New York to Chicago, solid, and largely over.

"The gross income of your corporation in 1852 was less than \$2,000,000; in the year 1895 the gross income of the corporations in your system was over \$133,000,000. Those who are acquainted with the revenues of the various States forming our good country,

and are acquainted with the revenues of our entire nation, will know that this bears a very formidable proportion to either. Now, such a corporation as this cannot be conducted without bringing itself closely in connection with the people of the United States, at least with a large portion of the United States, and upon their prosperity depends very largely, therefore, the prosperity of your Company. To show you what it does in the way of distributing its revenues, in the year 1852 its pay roll amounted to less than \$400,000; in 1895 its pay roll amounted to over \$36,000,000, an average pay roll of over \$100,000 a day. This, probably, will better than anything else illustrate to you the fact that with the prosperity of the individual is the prosperity of your corporation.

"This \$36,000,000 bears but a slight proportion to the daily disbursements of the Company, but it is the disbursements to your officers, employees and those that are engaged in looking after your business. The number of men that were employed in 1852 we have no record of to-day; it certainly could not have been a very great number, but in the past year you had 97,000 men upon your pay roll. All this has been transacted, the vast disbursement of this money has taken place in the various administrations of your Company, without your Company having defaulted in any manner on any of its financial obligations whatever. It has paid promptly, on the day it agreed to pay, every pay roll it undertook to pay. No man has ever asked it justly for his money who has not promptly received it when it was due. After making all this distribution of funds, what has remained for you that are here, the shareholders of the Company, for yourselves? It has been a distribution to you in the last half century of over \$166,000,000, a very fair rate of interest on every dollar that has ever been invested by the shareholders in the corporation from the first day it was invested to the present time.

"Now, I could go on and dwell upon these statistics, and I could tell you many things that have occurred in the advancement of the prosperity of this great country in connection with your line, because a kind Providence has spared to me nearly one-half century of my life, more or less, in the service of this Company. But there are those here who will follow me that can much better refer to

that, but when I state that I have had the pleasure of serving you for that length of time I will not omit to say that there are others still now in the employ of your Company who outrank me many years in time. There are many who have been in your Company the whole half century of its existence, who have faithfully performed the duties confided to them, and to whom, as I have before said, are due from their unwavering fidelity to your interests, the results that have not only come to this corporation, but the results that have largely come to your good city here, to the great metropolis at the western end of your line and to your State. No enterprise of this kind can be conducted with the unswerving integrity that has marked those whom you have entrusted with its care—our predecessors, long ago gone to their resting place—without at least an acknowledgment on our part of the results that have so largely come to you from the interest they have taken, not only in the welfare of your Company, but in the welfare of this great Commonwealth.

“To show you that the corporation has not been the only one to share in these results, we have only to turn to the progress of our State, to the progress of our nation, in the past half century. In 1852 there were less than 25,000,000 people in the United States. To-day there are over 70,000,000. The State of Pennsylvania numbered in its people less than 2,500,000 in 1852, and to-day it numbers 5,700,000, if not nearly 6,000,000 of people, as happy, as well clothed, as well governed as any 6,000,000 of people that exist in any part of the world; not oppressed in any way by any transportation interests, and liberal in every dealing with the transportation interest of their State. It is largely through the liberality with which the citizens of your good Commonwealth have dealt with you and the return that you have given that the mutual prosperity has been given to both the Commonwealth and your corporation. Philadelphia in 1852 numbered less than 500,000 people, and to-day it numbers nearly 1,200,000. Pittsburgh numbered less than 40,000, and to-day it numbers 280,000, nearly 600 per cent. more. You will bear in mind that the City of Pittsburgh is not a consolidated city like the City of Philadelphia, and, therefore, in referring to its population we do not include its suburban districts, as we do here.

"Now I give these statistics to point out to you that the prosperity you have had has been shared largely by the country which your lines have passed through. When you stretch out to the large commercial centres of Cincinnati, Louisville, St. Louis, Chicago and Cleveland, which are the outposts of your great corporation, you will find that they have all made in the march of progress equal strides with what we have enjoyed in the East. I will but briefly refer to one or two things to illustrate more forcibly to you the fact, fellow-shareholders, because I am one of you, that the officers and employees of your Company are of the most genuine class of people that are to be found in the employment of any corporation or any government in the country.

"Then there is the fact that each man stands closely alongside of each other man in sharing his prosperity and his adversity. As an evidence of this, some ten years since they combined together to form their Relief Fund, and that Relief Fund to-day numbers 52,000 members, and has distributed among its membership in the way of caring for the sick, for the widows, for the orphans, for those who, in the performance of their duty, have sacrificed their lives, sacrificed their limbs, and otherwise, a sum of money over \$6,000,000. It is to-day distributing from those who are more blessed by health and by relief from accident to those of their fellow-employees who have met with misfortune a sum of money equal to \$2000 for each working day. This is one of the greatest evidences in the world of the fact that your prosperity is insured so long as you can get that fellowship to exist among your employees and between yourselves and employees.

"And now let me close my few remarks, which have lasted longer than I intended, by thanking you for the privilege that has come to me to preside over your corporation at this time, to thank you especially that I have been supported by those who are so close to us in the administration of the affairs of this Company, and by the rank and file of the employees, from the lowest, the humblest, to the highest in the performance of their duties. Let me ask of you, as the years pass on, a fair and honest treatment of those men, and to you, rest assured, they will always give a fair return for all you give them."

Upon the conclusion of Mr. Roberts' address, which had been strongly punctuated from time to time by the hearty applause of the audience, he was greeted with a long-continued rapturous clapping of hands and waving of handkerchiefs. When the enthusiasm quieted he arose, and, in introducing Governor Hastings, said :

"It is hardly necessary to introduce to you the Governor of the Commonwealth, who has kindly consented to be present here to-day and say a few words, as representing the State of Pennsylvania, which has given breath to this corporation, and to which we owe the fidelity of children to their supporters."

Governor Hastings, after acknowledging the applause which greeted him as he stepped to the front of the platform, spoke as follows :

GOVERNOR HASTINGS' ADDRESS.

"Ladies and Gentlemen : In the early part of this century, when the building of the branch railroad from Lancaster to Harrisburg was being projected, and public meetings to induce the citizens along the proposed line to subscribe for the stock were being held, General Cameron was an enthusiastic advocate of the enterprise. In a speech at Elizabethtown he said he 'hoped to see the day when he could take his breakfast in Harrisburg, go to Philadelphia on the cars, transact his business there, and return to Harrisburg in time for a good night's rest.' One of his auditors, a typical Pennsylvania Dutchman, who was well acquainted with him, interrupted him to say, 'Simon, I always knew you were a little rattle-brained, but never thought you were so big a dunce, to talk that way.'

"Pennsylvania, in the early days, took the lead in the development of transportation facilities. As early as 1796 the State had completed three lines of turnpike connecting the Delaware with the Ohio. These were called the Northern, Middle and Southern State roads, and were as superior to the Revolutionary roads as the canal was to the turnpike. Six-horse teams were attached to the passenger coaches, and also to the Conestoga wagons for the transportation of freight. The horses were gaily caparisoned in bells and ribbons, and the stage drivers were the heroes of the hour. The stage taverns, large, two-story buildings, were located ten to twelve miles apart, and the arrival of the stage coach was the principal



D. H. HASTINGS



CHARLES F. WARWICK



J. TWING BROOKS



JOSEPH M. CHOATE

event of the day. Most of the taverns were kept by men who had served in the Revolutionary war, and the rude pictures of Washington, Lafayette, Putnam and Wayne upon the sign-boards generally indicated their popular heroes. There were also upon these signs buffaloes and other animals not specified by Buffon, and owls and fowls whose species would have bothered Audubon ; there were the Black Duck, the Golden Swan, the Spread Eagle and the Cross Keys.

"A local historian of the time says, 'The tavern keepers and landlords are really the only lords we have in Pennsylvania. They furnish us with militia Colonels and Generals, and Members of Congress, and do the honors of the town, keeping up its reputation for hospitality.'

"Pennsylvania's system of turnpike roads was the first complete system in the country, but they had scarcely been finished when public agitation in favor of a complete waterway to connect Pennsylvania with the great waterways of the West was commenced. Succeeding Legislatures authorized surveys and estimates, until finally the State itself undertook the construction of a canal from Columbia on the Susquehanna to Harrisburg, and thence along the Juniata to Hollidaysburg, with the Portage Railroad across the Alleghenies to Johnstown and the western section of the canal from that point to Pittsburgh. Public sentiment demanded still further development, which resulted in the north and west branch canals on the Susquehanna. The artificial waterways provided transportation as far east as Columbia, but scientific skill was unable to construct a canal from that point to Philadelphia. To keep the trade in Pennsylvania, and divert it to Philadelphia instead of Baltimore, it became necessary to construct a railroad between these two points. For the construction of all these enterprises the State expended about \$18,000,000.

"The successful operation of this line of railroad and the building of similar lines in other parts of the country induced the people of the State, through the Legislature, to agitate further railroad development. Again commissions were appointed and surveys authorized. In 1839 Charles L. Schlatter was authorized by the General Assembly to survey a line of road which would connect

Pennsylvania with the trade and commerce of the great West. In 1841 he submitted his report setting forth three feasible lines of road, which he called the Northern, Central and Southern, connecting on the East with the railroad already running to Harrisburg. His report, together with a map of his proposed lines, was printed by authority of the Legislature, and remains on file among the Archives in Harrisburg. His central route was practically adopted in the building of the Pennsylvania Central Road; his northern route is substantially the line of the Philadelphia and Erie; while the Cumberland Valley Railroad, east of the Alleghenies, and the Baltimore and Ohio west, cover to a large extent his proposed Southern lines.

"Each successive improvement met with its full share of opposition. General Alexander Ogle, member of Congress in the days of General Jackson, in the course of a Fourth of July oration, described the opposition to the turnpike and wagon transportation: 'Your grandmother,' said he, 'can tell you what a rumpus these ninnies raised around the first wagon road over the mountains to Pittsburgh. It would break up the packhorse men, and the horsebreeders would be ruined. I told them that one wagon could carry as much salt, bar iron and brandy from Philadelphia or Baltimore as a whole caravan of half-starved mountain ponies; and I further told them that of all the people in the world *fools have the least sense.*' The canal system met with even more opposition than the turnpike, and the antagonism was increased as against the railroad improvements. The stage coach and the Conestoga wagon rendered the packhorse a useless institution. The canals and the railroad frequently left the Pennsylvania tavern and the village that surrounded it off to one side to seek other patronage than the traveler in a hurry.

"On the 13th of April, 1846, the Pennsylvania Railroad Company was incorporated, and then commenced a railway development never equalled in any country or in any time. May 16, 1857, it purchased from the State the main line from Philadelphia to Columbia. At that time it owned and operated less than 400 miles of railroad; to-day it owns and operates within the borders of the Commonwealth 3253 miles of road, and outside of the State 5630 miles, making a total of 8883 miles.

"It now extends into 53 counties of the State; has reached the coal mines and ore deposits, the oil fields and the immense agricultural districts, until there is not a material resource of the Commonwealth that is not within easy reach of the best markets of the world.

"The population of the State at the time of the incorporation of this Company was about 2,000,000. It has since then multiplied threefold. During the intervening period the Pennsylvania and other railroads have entirely changed the map of the State. Towns and cities have sprung up upon their lines whose capital, added to the native resources, have combined to the general advantage of all our people. It is but asserting a truism to say that the railroads have done more to develop the material resources of the State than all other business enterprises combined.

"It is not my purpose to recount the great volume of the business done by this Pennsylvania institution, nor to attempt to enumerate the passenger traffic, or aggregate the transportation of freight, or the steady march of improvement and development of the Company. Its 9000 miles of road, its 28,000 stockholders, its 100,000 employees, its prudent management, vigilant oversight, the regular dividends, all combine to make it the greatest and most complete railroad enterprise and organization in the world.

"Its last sale of mortgage bonds to the amount of £1,000,000 sterling, dated July 1, 1895, bearing three and one-half per cent. interest, maturing in fifty years, has established the fact that the financial credit of the Pennsylvania Railroad Company at that time was equal to the credit of the United States Government in the markets of the world. There has never been a breath of scandal against the honesty, integrity or capability of its management. It has never been in the hands of a receiver.

"It is the original and best working civil service organization in the country. The promotions are based absolutely upon merit, and the best proof of this proposition lies in the fact that John Edgar Thomson commenced his professional career with the Engineer Corps employed upon the original survey of the road from Philadelphia to Columbia. Its next President, Colonel Thomas A.

Scott, started as station agent in the village of Duncansville, and its present honored President began as a rodman in the engineering corps.

"The Pennsylvania Railroad Company has kept steadily to the front in the march of railway improvements. It was the first to use steel rails in 1863, to use Bessemer steel rails in 1865, to use the air-brake in 1866, the track tank in 1872, and the signal block system in 1873. Its display at the Chicago Exposition was the best picture story that could have been made of fifty years' development in American railroads.

"When Pennsylvania was making up her exhibit for the Cotton States and International Exposition at Atlanta, and had brought from her treasures of history and patriotism her native wealth and the ingenuity of her citizens, and had gathered them all together and appointed a day upon which to lay them at the feet of her Southern sisters, her representatives were conveyed to the capital of Georgia in the finest and best equipped railroad train that ever crossed the Mason and Dixon line. It was the exhibit of the Pennsylvania Railroad Company.

"The Company's interest in the individual welfare of her employees is constantly being made manifest. The saving fund managed by the Company in the interest of the employees now has in its treasury more than \$1,500,000. Its relief fund, which embraces in its membership over 80 per cent. of its employees on the lines east of Pittsburgh, is now returning to those entitled to relief 'over \$1500,' as the President says, 'every day of the year to care for the widow and orphan, or to pay the doctor and the surgeon.' It fosters the railroad branches of the Young Men's Christian Associations, giving direct financial encouragement, erecting buildings, furnishing literature, and aiding in the general moral and intellectual development of those who do the work for the Company.

"While the Company is the largest taxpayer in the State, it has always exercised a broad and generous relation to the people and to related institutions. It has always conveyed the charitable gifts of the country free over its lines, and whether American bounty went to relieve the sufferings of the people when the yellow fever was in Jacksonville or Memphis, or the earthquake at Charleston,

or the flood at Johnstown, or the famine in Russia, this road could never be induced to charge a dollar for the transportation.

"During the War of the Rebellion it was the first to come to the aid of the Government in the transportation of troops to the fields of battle, and the Government created a new office, that of Assistant Secretary of War, and insisted upon Colonel Thomas A. Scott's accepting the position in order to receive the benefits of that great man's marvelous ability in the transportation of troops and supplies and the rebuilding of railroads captured from the enemy.

"At the outbreak of the war the Company offered to contribute \$50,000 to be used in bounties for the purpose of inducing enlistments in the army, and towards the close of the war actually contributed \$50,000 as a nucleus for the establishment of the State's Soldiers' Orphans' Schools.

"On the 15th of April, 1861, before the echoes of the shot that had been fired on Fort Sumter had ceased their reverberations among the Allegheny Mountains, five companies of Pennsylvania soldiers reported to Governor Curtin for the defense of the Government. Their services were accepted, and the Pennsylvania Railroad Company with the utmost promptness conveyed them safely to Washington, where they were the first troops to report to President Lincoln. These 'First Defenders' have been recognized by the National Government and also by their own State, and on day after to-morrow the few who are left of them will be conveyed by the same Company over the same route upon which they passed thirty-five years ago.

"The Pennsylvania Railroad Company, like every other successful institution, has not been exempt from criticism, but the happiness of this occasion shall not be marred by even a reference to it.

"It gives me pleasure to be here to-day and in this distinguished presence to congratulate President Roberts and his associates upon fifty years of successful administration of a Pennsylvania institution that has done more for the industries of the people of the State than any other private corporation."

Mr. Roberts then fittingly presented Hon. Charles F. Warwick, Mayor of the City of Philadelphia, who delivered the following address :

MAYOR WARWICK'S ADDRESS.

" Mr. President, Ladies and Gentlemen : We have met to-day to celebrate the fiftieth anniversary of the incorporation of the Pennsylvania Railroad Company. It is an event of significant importance. Every Pennsylvanian should take pride in the growth of this great corporation, for it has materially aided in the development of the resources of our State.

" From the time of John Edgar Thomson, through the period when the Company was under the direction of Thomas A. Scott, one of the ablest men in the management of a railroad this or any other country has ever produced, down to the present time, when the corporation is under the wise and conservative direction of Mr. George B. Roberts, the Company has been most ably managed. So far as I know, there is not in America nor in Europe a greater single system.

" The combination of mind, skill, energy and money enables us to do that which, if left to individual or unorganized effort, could never be accomplished. This union of forces is what we call corporate power. Capital and labor are terms sometimes misunderstood, and are often used by demagogues to conjure with and to arouse the anger and passions of men. A man's skill, energy and industry are as much capital as the money of the millionaire.

" Capital and labor should go hand in hand, giving opportunities to each other and dependent upon each other. When united and working together they are a great force for the public good. A corporation such as the Pennsylvania Railroad Company is a Republic or State within itself ; its employees find their ambition satisfied by reaching the honors within its gift, for responsible positions in its management, in every direction, mark the success of individual effort.

" The President of the United States may be an accident, the result of political scheming, but the president of a great corporation, such as this, is one whose honors have come because of his worth and fitness ; his selection is the recognition of great qualities, and his position is correspondingly one of honor.

" In 1846, the date of the incorporation of this Company, the population of Philadelphia was 340,000. At that time the Penn-

sylvania Railroad Company began its construction, and to-day the total length of its lines east of Pittsburgh and Erie owned, leased and operated, is 4034.02 miles of railroad and 8073.14 miles of track.

"It owns about 50,000 cars and 2000 locomotives. There are over 100,000 men on its pay rolls. These figures give some idea of the immense interests of this Company.

"When you think of this wonderful growth, and bear in mind that in 1836, only ten years before the date of its incorporation, there were but little more than 1000 miles of railroad on the American continent, you may have some slight appreciation of what this means.

"To-day we have in the United States from 140,000 to 150,000 miles of railroad, giving employment to more than 900,000 men. It has been calculated that about 3,000,000 people are directly dependent upon the labor of these men for their daily bread. Surely this is a wonderful age in which we live.

"Two of the most potent factors in civilization have been steam and electricity, and we cannot sufficiently appreciate the labors of such men as the Marquis of Worcester, Savary, Watts, Franklin, Fitch, Fulton, Stephenson, Morse and Edison.

"There is nothing that so shows the advance and progress of the human race as the use and application of steam and electricity in the matters of travel and communication. When we recall the fact that before this century our fathers used the canal boat, the stage coach, the Conestoga wagon and the sailing vessel as the only methods of travel, we may have some idea of the wonderful and rapid progress that has been made.

"There had been little or no advance from the days of the ancients, and the methods of transportation were about the same as in the age of the Ptolemys.

"The nineteenth century, with its progress, stands as the greatest era in the history of the human race.

"The steamship, the locomotive, the telegraph and the telephone belong distinctively to our century, and they are civilizing in their influences in that they bring us in touch with the whole world.

"Steam and electricity have done much to wear away prejudice,

bigotry and hatred ; they bring men closer together and induce to friendly and social intercourse. They overcome distance and time, and make all men our neighbors. The ancients considered all outside of their States as foes ; stranger and enemy were convertible terms. Oceans and deserts no longer separate men and nations as in the past ; these great dividing spaces are but links uniting all sections of the world together by means of steam and electricity.

"With these two forces every place is convenient, no matter how great the distance that may divide. A journey in the past was a dread ; to-day it is a pleasure. Steam carries us anywhere, and electricity with a flash of light brings to us the current news of the day from every quarter of the globe.

"In 1801 the first railroad was built by Benjamin Outram, in a suburb of London, and it pointed the way to our present systems. The first railroad in the United States upon which a locomotive was used ran from Honesdale to Carbondale in this State, in the year 1829. This was only sixty-six years ago, within the memory, or at least the lifetime, of many on this stage and in this audience. To-day there are in the world 325,000 miles of railroad, and of this number one-half is in the United States.

"In 1846, at the time of the granting of the charter to the Pennsylvania Railroad Company, you could have left Pittsburgh early in the evening and have reached Johnstown (103 miles) in twenty-eight hours on a canal boat called a passenger packet, changing horses thirteen times. The stage coaches, however, were somewhat faster. I wonder how this speed would suit the traveler of to-day ?

"In 1838 a steamship called the 'Sirius' began ocean navigation between England and our country. She was a vessel of 700 tons burden, and made the voyage in a little over eighteen days. The 'Lucania,' of 12 000 tons, makes it now in less than six days.

"In May, 1844, Professor Morse proved by the operation of his experimental line between Washington and Baltimore that the establishment of an electric telegraph was practical, useful and remunerative. In 1856 the Atlantic cable was successfully laid, uniting the Old World with the New.

"The telephone has been invented and put to use within the

memory of our children. The future, with its promises, is beyond the power of prophecy. The possibilities of electricity are known only to God.

"But what can we say of our Republic in this connection?

"Could our nation have so grown and developed and prospered had it not been for the railways that stretch from lakes to gulf, from ocean to ocean, holding us together in their iron grasp, binding the States together in their interests with great hooks of steel? The railroads have done much in the past and will do, we all hope, more in the future, to bring us closer together as a people, to promote social intercourse and remove friction between the States.

"When we consider the progress that has been made in every direction we stand in amazement before the results of man's intellect and genius. The stupendous structures of the past, erected under the direction of powerful rulers, dwindle in the presence of these marvelous inventions of our century, that are so humanizing and civilizing in their influences.

"The locomotive whose whistle to-day startles the Pyramids from their eternal slumbers dwarfs them in comparison when their uses are considered; one was to perpetuate the name and glory of a dynasty, and was erected by proud and insolent rulers with the blood and sweat of slaves; the other sprang from the intellect and genius of man for the welfare, comfort and happiness of the human race. One makes us marvel at the time that was wasted, and the other at the time that is saved.

"I never look upon a locomotive that I do not feel as if I stood in the presence of a mighty living thing, breathing and throbbing with heart and soul and lungs, and when it starts it moves with slow and thoughtful deliberation, but with grace and power. It dashes across the plains, climbs over the mountains, plunges down into the valleys, gropes its way through the tunnel, dark as Hades, leaps across the rivers, and comes to its destination like a racer on the homestretch, bringing in safety its freight of human lives.

"I have seen an engineer pat his iron horse as a jockey would his steed, after a successful run, while the great thing would stand snorting and puffing as if out of breath, and at times it seemed as if it must be a thing instinct with thought. And what should we

say of the engineer who has been standing at his post with his hand on the lever guiding and directing this great thing of life, who has been on the watch while we have slept, who has been peering out of his cabin window into the darkness of night watching the signals and for any danger that may lurk on the way ?

"A locomotive with its power controlled by the intellect of man is one of the grandest combinations of mind and matter the world has ever seen.

"Notwithstanding the great progress that has been made in the past, no one can measure the possibilities of the future. Electricity is yet in its infancy, in so far as its application to the uses and comforts of man is concerned. We stand but in the shadow of the coming day. If scientific study and research be not interrupted by wars or great social revolutions no one can guess or prophecy what the future has in store. Electricity has been applied in the direction of travel, light, heat, power and sound, and yet new discoveries are being made almost daily. What would our fathers have said if they had been told that in time we could converse with a man 1000 miles away, and hear him as distinctly as though he were at our side ?

"What would they have said had it been predicted that in fifty years we would travel from Philadelphia to New York in less than two hours, or to Pittsburgh in a night, sleeping in an easy couch the whole distance, or that a voyage from the Old World to the New could be made across the Atlantic in less than six days ?

"What would they have thought had it been prophesied that a speech in the English House of Parliament would reach us and be read the day of its delivery ?

" ' Yet I doubt not thro' the ages,
One increasing purpose runs,
And the thoughts of men are widened
With the process of the suns. '

"The boy who hears my voice to-day, if he live fifty years from this hour, may look back on these times as slow and almost lost in the mist of ages. In view of what we have seen accomplished in so short a time, it is impossible to be incredulous as to any predic-

tion that science may make as to the results yet to be reached in the years to come."

As Mayor Warwick took his seat President Roberts arose and said :

"The city that stands at the western terminus of the main section of the railroad cannot be passed by on an occasion like the present, seeing that the extent of its manufactures is a most important feature in the prosperity of the Commonwealth and of the Pennsylvania Railroad Company. We hoped that Mayor Henry P. Ford would be here in person to represent the city, but he is prevented by severe illness from attending, and has delegated Mr. Clarence Burleigh, the City Attorney, to take his place."

Mr. Burleigh was warmly received, and spoke as follows :

MR. BURLEIGH'S ADDRESS.

"Ladies and Gentlemen : In these wonderful days of human progress and achievement, during which man, by his skill, industry and invention, has well nigh accomplished the impossible, so that practically perfection in nearly everything greets the senses upon every hand, it is not only a pleasure but an absolute honor to congratulate that institution, whose organization, policy and government, whose practical operations, unlimited facilities and signal success challenge the admiration of all, and make it equal, if not superior, to any competitor in the world.

"A half-century has passed into history since your incorporation. During that time thrones have toppled and nations have been wrecked ; wars have raged and religious creeds have changed ; political organizations without number have sprung into existence, have lived and thrived and governed, and have been gathered in by those who in their turn have followed them ; the strength and stability of our own national government has been severely tested upon the field of carnage ; treason has found a foothold and has been vanquished in our very midst, and multitudes of private enterprises of great pith and moment have appeared and disappeared from all around us.

"Yet, during all this eventful period your splendid organization has not only nobly withstood all the rude shocks and assaults of time and tide, but has almost daily gained in strength, vigor and power, and progressed and advanced, reaching no barrier it did not surmount, finding no obstacle it did not overcome, always having but one object—the highest possible perfection attainable by human efforts.

"This uninterrupted progress, this continuous advancement and success during this most eventful and dangerous period of our country's history, not only argues but demonstrates the wisdom and integrity of the government of this great corporation and the masterly ability of its management. Like some majestic vessel, constructed by most expert builders and guided by pilots most skilful, it has sailed with safety and amazing success over waters whose shores were strewn with wrecks, and on whose bosom many noble craft were drifting towards perilous reefs or deceptive shallows, inevitably doomed to complete destruction, causing the ruin of all concerned.

"Therefore, as you pause a moment in your busy lives at this milestone in the dusty highway of your corporate life and felicitate yourselves upon the material success and profit you have attained, more than a passing thought should be bestowed in recognition of the brilliant genius and ability of those who made so successful your voyage during such dangerous times and upon such troubled waters.

"Although a stranger here, still I am not without observation of the results and benefits of your enterprise, nor without reasons for joining with you in this celebration.

"I come from that great human hive of industry and invention standing at Pennsylvania's western gates, whose ground is sacred with our country's history and glutted with Nature's richest wealth ; whose manufactories are gigantic and legion, with furnaces whose never-quenched fires transform night into day ; the hum of whose wheels is incessant, and whose finished products reach to every clime ; a city with no industrial goal but perfection ; a city refusing to recognize the impossible in anything physical or manual. Its output of iron and steel and glass and coal is simply fabulous,

and enough to almost stagger human credulity, and but for carrying facilities most perfect its shops would be closed and its army of workmen be idle upon the street. Hence Pittsburgh's imperative necessity in the beginning is now, and ever shall be, the very best railroad and the very best railroad facilities in the world. These were, and are, the *sine qua non* of reaching or maintaining its present standing or accomplishing any future progress.

"True, we have two noble rivers flowing majestically through the very heart of the city and forming at their historic junction the broad Ohio, all studded with craft and alive with fleets, and bearing on their broad bosom from Pittsburgh to the Gulf a tonnage greater than that of New York harbor to-day. Nature's own great highway—but even that don't suffice. Droughts and freshets succeed each other in distressing monotony, and there are other destinations besides those 'down the Mississippi.'

"Inferior and second-class means of carrying would be suicidal for such a manufacturing metropolis; it must have the best one, reaching with its auxiliaries and ramifications practically from the Atlantic to the Pacific, and from the Great Lakes to the Gulf, with a superabundance of facilities, and the enterprise and the courage necessary to keep abreast of the time and to supply all needs. Therefore it is but natural that we of Pittsburgh rank among our noblest and best acquisitions this great railroad, famous for its excellency throughout civilization; this road which makes its western terminus in our city and its eastern terminus in this, and thus, like a huge colossus, doth bestride the great Keystone State, gridironing almost its entire territory with a lattice-work of rails used by and profitable to all the inhabitants thereof; with its swiftly-revolving wheels it works and toils and labors by day and night to transport our products and attend to our commerce, and thus becomes one of the chief factors in our municipal greatness.

"Its name is synonymous with safety and convenience, and its enterprise and progress are household words; its capacity and energy are well-nigh unlimited, and its stability and excellency are conceded.

"Pittsburgh extends to the Pennsylvania Railroad Company its heartiest congratulations on this the occasion of its fiftieth anniver-

sary ; may it live long and prosper, and may the end of the next fifty years of its existence find it as much superior to what it is to-day as its road of to-day is superior to that embryo of 1846."

The venerable Frederick Fraley, LL.D., who had been an important personage at the birth of the corporation, now appeared to congratulate it upon having reached such a glorious manhood. As the form and familiar features of the greatly respected nonagenarian passed before the audience a welcoming applause met him. Owing to his advanced age he did not make a speech, but in place thereof he handed President Roberts a letter he had prepared for the occasion. Mr. J. C. Sims then read the letter, which was as follows :

MR. FRALEY'S LETTER.

" PHILADELPHIA, April 10, 1896.

" George B. Roberts, Esq., President Pennsylvania Railroad Company :

" Dear Sir : I promptly accepted your invitation of March 30th to participate in the proposed celebration of the fiftieth anniversary of the incorporation of the Pennsylvania Railroad Company on the 13th of the present month. I now venture to reply to your request that I shall, in the form of a letter, which may be read at the meeting to be held in the Academy of Music on the afternoon of that day, present some information that may be, even now, of public interest.

" At the close of the administration of President Madison, in the year 1817, the question of international improvements of a comprehensive character assumed large proportions and claimed the attention of the men of those days who were potent in public affairs. Among the great works placed earliest under construction was the Erie Canal, of the State of New York, authorized by the Legislature April 15, 1817, and the whole line ready for use by October, 1825.

" In the month of July, 1825, I passed over the canal from Schenectady to Utica in a boat fitted up to convey passengers, and enjoyed the novelty of such a trip, with a company on board that filled the boat to its utmost capacity. Other States followed the

example of New York, and in 1840 the results accomplished were a considerable quantity of diversified work complete and incomplete, and a vast amount of State and corporate indebtedness. During this period the germs of the railway system were forming, and some short tracks of railway, to facilitate the transportation of freight and passengers, made their appearance. In the year 1830 a book was published under the title 'A Connected View of the Whole Internal Navigation of the United States, Natural and Artificial, Present and Prospective,' by a citizen of the United States.

"This history was the work of the Hon. Samuel Breck, of Philadelphia, who was one of the Representatives of Philadelphia in Congress in 1825. This was when the election of a President of the United States devolved upon the House of Representatives, and John Quincy Adams was chosen President, he being one of the three candidates who had received the greatest number of votes in the Electoral College, his competitors being Andrew Jackson and William H. Crawford. From this book I make the following selections:

"First, that the average annual income of the United States for the years 1827-30, inclusive, was \$23,000,000, and the average annual expenditure, including the public debt, \$18,000,000. Second, that appropriations were made for internal improvements during the years 1825-28, inclusive, amounting to \$14,000,000. Third, that the Baltimore and Ohio Railroad Company was incorporated February 28, 1827, and its construction began July 4, 1828. Fourth, the introduction of locomotive engines in England in 1836, invented by Guernsey and Stephenson, and the trials of the 'Rocket' and 'Novelty' engines, with a reference to the improvements in locomotive engines made by the American engineer Winans. Fifth, the system of internal improvements for the State of Pennsylvania, commencing at Philadelphia, by a railroad to extend to Columbia in Lancaster County, a canal from Columbia to the Allegheny Mountains, railway and inclined planes to cross the mountains, and a canal to the city of Pittsburgh. Sixth, a eulogistic notice of William Lehman, who was a member of the Pennsylvania House of Representatives from Philadelphia in the year 1817. He has been styled 'the Legislative father of the Pennsylvania system of Canals and Railroads.' He introduced a

bill in the session of 1817 for a Board of Commissioners to be appointed to take preliminary steps for making canals and railroads. This was the very same year in which the Erie Canal was begun in New York.

"In the year 1840 Mr. Henry S. Tanner published a description of the canals and railroads of the United States, and as this year comes close upon the incorporation of the Pennsylvania Railroad Company, references to its pages are instructive. First, the construction of the Philadelphia and Columbia Railway was authorized by the Legislature of Pennsylvania, March 24, 1828. It was completed in October, 1834. Second, the Harrisburg, Portsmouth, Mt. Joy and Lancaster Railroad was incorporated in 1832, and a single track completed in September, 1838. Third, the Philadelphia and Reading Railroad, incorporated 1833, commenced 1835, was open for public use July 17, 1838. Fourth, the Philadelphia, Wilmington and Baltimore Railroad was consolidated from four companies on February 5, 1838.

"We have now reached a point where the Pennsylvania Railroad's history begins. The agitation for a continuous railway from Harrisburg to Pittsburgh began to take definite shape at the convention of the 6th of March, 1838, at Harrisburg, in which twenty-nine counties were represented. Robert T. Conrad, of Philadelphia, presided, and the subject was thoroughly and ably discussed, with the result that surveys were authorized to ascertain the feasibility of a continuous route from Harrisburg to Pittsburgh. Hother Hage made the surveys through the counties of Franklin, Bedford, Somerset, Westmoreland and Allegheny. In the following year the Canal Commissioners appointed Charles L. Schlatter to survey similar lines from Harrisburg to Pittsburgh. A meeting was held on December 9, 1845, at Musical Fund Hall, Philadelphia, Thomas P. Cope presiding.

"Here speeches were made by William H. Meredith, Henry D. Gilpin, Isaac Hazlehurst, John J. McCahen, James M. Sanderson, of Philadelphia, and George Darsic, of Pittsburgh. Committees were appointed to prepare an address on the subject to the people of the State, and to petition the Legislature for an Act of Incorporation for a railroad between the points named. On the 13th of

April, 1846, the Act of Incorporation was passed by the Legislature, requiring that \$7,000,000 should be subscribed to the capital stock and that thirty miles of railroad should be put under contract by the 1st of July, 1847.

"On the 27th of April, 1846, a public meeting was held in the Chinese Museum building, which was largely attended, and over which Thomas P. Cope presided, the Vice Presidents being John K. Kain, George N. Baker, Robert Toland, Isaac W. Norris, George W. Carpenter, David S. Brown and Thomas Sparks. The Secretaries were Henry Welsh, John S. Littell and Thomas Tustin. Mr. Robert Toland, Chairman of the Committee of Twenty-six appointed at the Musical Fund Hall meeting of December 10, 1845, made a report recommending the approval of the Act of Incorporation of the railway company, and urging that our fellow-citizens should take prompt and energetic measures to secure subscriptions to the capital stock, and that the City of Philadelphia and other municipal corporations of the County of Philadelphia should by requisite legislation make such subscriptions in addition to those derived from other sources as would secure a sufficient amount to insure the granting of letters patent to the railroad company.

"Mr. David S. Brown offered a series of resolutions to carry the recommendations of the Committee into effect, and made an address explanatory of the resolutions. They were seconded by me in a speech embodying the information which would commend the great project to the approval of the meeting and fully justify the raising of even a greater sum than that originally contemplated. Other addresses were made by Colonel William Bigler, afterward Governor of this Commonwealth; William A. Crabbe, Mr. Hill, of Montgomery, and Victor Piolet, of Bradford County.

"The resolutions were unanimously adopted, the Committee was continued, and by their untiring exertions all that was requested was successfully accomplished, so that in February, 1847, Governor Shunk issued the letters patent, and the great Company, of which not only Pennsylvania but the whole Union is justly proud, was placed on the foundation on which I predicted it should rest, and which as time progressed would be recognized as the Colossus of Roads.

"In fifty years it has been making the record, and now stands as the best constructed, the best equipped, the best administered and the best esteemed in the United States. I may now venture to make a brief reference to the marvelous development of the railway system of the country. In 1852 there were 10,900 miles of railroads constructed. On January 1, 1895, the total mileage in the United States was 179,279 miles. In 1840 the aggregate length of railroads in Pennsylvania was 953 miles. On January 1, 1895, the mileage in Pennsylvania was 9511 miles. The improvements made in railway construction, in locomotive engines, in car equipments, in the applications of electricity for signaling and for the transmission of orders, the construction of buildings for terminal facilities, repair shops, etc., would be represented by expenditures in money increasing in proportion to the mileage extended.

"When I go back to my recollection of what the means of transportation were in my boyhood, and compare the old Conestoga wagon of Pennsylvania and the changes wrought by the construction of turnpike roads and canals with what I am now familiar, in a fully laden freight train on a railroad, you may form some conception of how thankful I feel for being permitted to live and to be able to record, even in an imperfect way, such marvelous and beneficial improvements. The statesmen, agriculturists, manufacturers, merchants, mechanics, day laborers, the matrons and maidens of our country, have all contributed to make us what we are, and to give an earnest idea of what we are to be.

"Very truly yours,

"FREDERICK FRALEY."

Upon the completion of the reading of Mr. Fraley's letter, Mr. Roberts read a telegram from Hon. W. L. Strong, Mayor of New York, announcing that he was unavoidably prevented from being present by pressing engagements. The telegram concluded as follows :

"I congratulate the present management of the Pennsylvania Railroad Company in commemorating their fiftieth anniversary, and in honoring the men who originally conceived the idea of bind-

ing together with iron bands the great States of Pennsylvania, New Jersey, Ohio, Indiana and Illinois, and controlling the commerce and trade of that vast empire."

The next speaker was Mr. J. Twing Brooks, Second Vice President of the Pennsylvania Company, which operates the Pennsylvania Railroad Company's lines west of Pittsburgh. Mr. Roberts, in presenting him, spoke of him as one who had served the corporation long and faithfully, as his father had before him. Mr. Brooks gracefully acknowledged the compliment, and then proceeded to deliver an eloquent and scholarly address :

MR. BROOKS' ADDRESS.

"The employees of the Pennsylvania Railroad Company," he said, "are gratified to know that the work in which they are engaged is of such public interest as to draw together this magnificent assemblage. We are honored with the presence of the Chief Magistrate of the Commonwealth and representatives from the chief cities—Philadelphia and Pittsburgh. We are happy to have been able to allure for a short season from his clients and briefs the most eminent lawyer and most graceful orator in the Republic. It is also fitting that at this period of our history we should give some account of the manner in which we have performed the corporate trusts and responsibilities which were conferred upon us by the people of Pennsylvania half a century ago.

"The growth of our nation during the last fifty years has been marvelous. The Pennsylvania Railroad has been one of the instrumentalities of that growth, and has partaken of it. It was created, not according to the fashion of modern times as a scheme for selling bonds and stocks—in order that its projectors might be made rich—but because a railroad was imperatively needed to meet the wants of the people of the State. Being thus established as a public necessity and with an honest purpose, it was endowed at its birth with the surest elements of prosperity and success.

"It is proper that at the end of its first half century of existence the Company should render some account to the people of the State of the trust that had been placed upon it. The history of

the growth and development of the railroad have been so well treated by other speakers that I will omit reference to it now, and merely call attention to a few of the principles that have regulated the transportation service of the Company.

"Some of you think that the growth of the railroad has been marvelous, but it has hardly done more than keep pace with the marvelous development of the country. The principles that lie at the base of transportation are simple. The products of A are wanted at B, and the products of B are wanted at A. Transportation consists in the fulfillment of these wants, and its legitimate extent is to be found by multiplying that statement of wants by 75,000,000, for the number of the population of the country.

"The political and commercial elements necessary for the enterprise were happily blended at the time this Company was established. The Revolutionary War swept away the restrictions imposed by England upon the manufactures of the Colonies, and from that time the industrial energies of the people had full scope for development. The patriotic spirit of the Colonies, in placing the Northwest Territory in the hands of the new Federal Government, surrendered to the nation the control of the future development of the country, and the conditions of rapid growth were perfected by the discovery of iron and coal in Pennsylvania, of the iron-ores of Lake Superior, and by the development of the agricultural industry.

"The growth of transportation facilities is marked in our statute books by numbers of laws relating to turnpikes, canals, and railroads, and in the early part of the century the legislation on the subject was the more extended from the tendency of the people in those days to look to the Government to construct the means of communication and conveyance.

"In those years the people still held to the tradition of monarchical States, that the Government is the fountain of all patronage and should assume the cost of internal improvements. In this belief the Chesapeake and Ohio Canal, the Baltimore and Ohio Railroad, in part, the canal system of Pennsylvania, and the Erie Canal in New York, were begun.

"The Chesapeake and Ohio Canal became a total failure; indi-

vidual and municipal aid carried the Baltimore and Ohio Railroad through to success ; the Pennsylvania Canal system became an incubus to the State ; and the Erie Canal, though still a mighty factor in the Empire State, was paralleled by the New York Central Railroad in a few years after its completion.

"The engineering difficulties in Pennsylvania drove its people to a mixed system of railroad and canal transportation until the year 1845. In that year Philadelphia had a zigzag water and rail connection with Pittsburgh, and the State of Pennsylvania had a debt of about \$40,000,000, incurred mainly in constructing and maintaining it. The canal was frozen in cold weather, and it was continually in need of expensive repairs. Philadelphia merchants were behind their rivals in Baltimore and New York, and the people of the State were weary of the constantly increasing burden of their debt. In this posture of affairs the people of Pennsylvania found the tracks of the New York Central pushing farther and farther west without any equivalent development being made in this Commonwealth. The merchants of Philadelphia made up their minds that something must be done, and the meeting that was held in the old Chinese Museum building December 10, 1845, marked the first definite step towards the formation of the corporation. A memorial was drawn up and introduced into the State Legislature early in 1846. The Baltimore and Ohio Railroad were anxious for a charter for their line from Pittsburgh to Cumberland, and the two projects were sufficiently in competition with each other to cause a long and severe struggle. The fight was terminated, however, by the granting of a charter to the Pennsylvania Railroad on April 13, 1846, while the Baltimore and Ohio received the charter for its line eight days later.

"In the more recent years of the history of the railroad there are many points that are worthy of notice. The inclined planes that were formerly used to surmount the Allegheny Mountains have been done away with. The course of the railroad is also being improved year by year by straightening out the worst curves, and in other ways making the track more adapted to rapid locomotion. Although the first object contemplated by the Company was the development of transportation facilities for the State, the Company

soon grew beyond that, and extended its tracks to new markets and new centres of manufacture. Branch lines were constructed to every point where the traffic promised satisfactory returns.

"An important feature of the growth of the Company has been the acquisition of new lines, and their consolidation with the old corporation. Acquisition and extension have gone on until the Pennsylvania Railroad now controls 177 companies. This figure is rather larger than that given by the President, but I believe his estimate was made a couple of days ago and mine was figured out only this afternoon.

"Throughout its whole career it has been the policy of the Company to proceed with caution, and it has always been careful to guard the safety of the employees. There have been some stockholders who have been disappointed that dividends were not earned more rapidly, but it has been another unchanging feature in the Company's policy to declare no dividends unless the profit had been fairly earned. One great element in the success that has rewarded the policy has been the unswerving loyalty of the employees, who have recognized that their interests were identified with those of the corporation.

"From the moment of its creation to the present hour necessity has imposed upon the Pennsylvania Railroad Company three distinct phases of policy: First, original construction; second, acquisition of new lines by purchase or lease; third, consolidation and reorganization of acquired lines. The primary object of its existence was to secure commercial advantages to Philadelphia and a development of the resources of Pennsylvania. While this object has been kept steadily in view, the policy of its management has led to investments which have no reference to the commerce of Philadelphia nor to the resources of Pennsylvania. Directly or indirectly, however, these investments contribute to the traffic or income of the parent Company. Markets within and without the State are desired for the coals, ores and other products of Pennsylvania.

"The same is true in reference to the products of mines and manufactures in other States, wherein subsidiary lines are situated. The inevitable result is that in certain cases the Company is in

competition with itself, or it hauls traffic of the same kind for rival customers in opposite directions at the same time, or it engages in traffic that is in direct competition with Philadelphia, and apparently in opposition to the interests of Pennsylvania. It is sufficient explanation of these oddities in transportation to say that in every instance other companies would do the work if the Pennsylvania Railroad Company did not do it, and in every instance the income of the Pennsylvania Railroad Company is increased.

"The Company has been fortunate in its Presidents. Of John Edgar Thomson and Thomas A. Scott much might be said. Each, in his way, was particularly gifted, and contributed greatly to the continued success of the enterprise. The development that has taken place since the present President assumed control, in 1880, has also been marvelous.

"It will not be presumed that all the enumerated acts of administration have been performed by one man, nor, on the other hand, by various executive officers acting independently of each other and without a common impulse. No organization, however complete, no policy of administration, however perfect, could secure the best results for an empire like the Pennsylvania Railroad Company unless it were controlled by a single spirit, who combined in himself the attributes of supreme rectitude, supreme sense of justice, supreme modesty, complete knowledge of the Company's affairs and the devotion of his entire life to its interests. Such a spirit has for sixteen years last past directed the destinies of the Pennsylvania Railroad Company. 'Peace hath her victories no less renowned than war.' My tongue refuses to be silent until I have named him in your presence, and offered him the tribute of respectful and affectionate regard from all his associates—President George B. Roberts.

"There is a roll of honor that must be called before this tale is told. It bears the names of those who in recent and earlier days have been removed by death from their associates, who, as officers or Directors, helped to build the institution we celebrate to-day. Men of the highest excellence in their profession, honored for their ability, esteemed for their virtue : Edmund Smith, J. N. Du Barry, Strickland Kneass, Herman J. Lombaert, J. N. McCullough, William Thaw, Thomas D. Messler, John H. Hampton, Theodore

Cuyler, Josiah Bacon, Samuel Felton, John Price Wetherill, Henry M. Phillips, D. B. Cummins, Wistar Morris, Henry H. Houston. Their words and their deeds live after them. Sweet and precious is the fragrance of their memory.

"The Commonwealth of Pennsylvania has been gracious to its servant, and from time to time has bestowed upon it new powers and franchises to enable it to meet new conditions and maintain its place in the front rank of American Railways.

"Long may the people of Pennsylvania continue to give to the Pennsylvania Railroad Company their generous confidence; may the officers and employees of that Company continue to deserve that confidence for ever!"

In introducing the next speaker Mr. Roberts said :

"This celebration would not be complete if we did not have a representative from the great State of New York. While Pennsylvania is the greatest manufacturing State of the Union, we cannot help but recognize that New York is its great commercial centre, something for the nation to be proud of. It is an empire within itself, and it is a city now approaching the first city in the world, and will surely outstrip all the other cities in the world long before we reach the next half century of our existence, if we reach that. I take pleasure in introducing Mr. Joseph H. Choate, who will represent for us the City of New York and its commerce."

MR. CHOATE'S ORATION.

"Fear not, my brethren and my sisters," said Mr. Choate. "I am only going to pronounce the benediction. You will be glad to know that I am not a well-informed man in railroad affairs. You will be pleased to learn that the address which I had prepared with great care for this occasion I have delivered to the reporters, because everything in it had been abstracted by the preceding speakers, among whom I have also divided the little time that was allotted to me.

"I asked President Roberts before we came into this building to consult his time-table and tell me how long these exercises would

last. 'Well,' he said, 'We shall all be short, and under no circumstances will the meeting be permitted to last more than two hours.' (It had then lasted two hours and a half.)

"While we know that the Pennsylvania Railroad never runs behind time, the emergency in which I am placed will compel me to punish you for a few minutes, but I promise you not to punish you as severely as the Managers of this railroad did me the other day, and for a punctual, prompt, momentary road, I think the story will meet with your approval. I set out from Washington on their famous 4 o'clock train, known as the 'Congressional Limited,' for New York, and on the way, in the dining car, I met the wife of one of the great statesmen of the land. She was going to New York; she was alone, and I was alone.

"I said, 'Madam, don't you think it is quite unsafe for you to travel alone to New York so late in the afternoon?' 'Oh, no,' said she, 'We are on the Pennsylvania road, and nothing ever happens on the Pennsylvania.' I congratulated her, and by and by the train stopped at the other side of Baltimore. It turned out that we had a hot box and arrived in Baltimore two hours behind time.

"We started in again from Baltimore, and before we got to Philadelphia there was another hot box, and we got here about four hours behind time; and then before we reached Jersey City a cylinder head blew out. I occasionally visited her and consoled with her, and said, 'You see, something does sometimes happen.' When we got to Jersey City I said, 'Well, Madam, how are you going to get up town?' She said, 'I shall take a cab.' When we got over the river on the New York side she came to me in great dismay and said, 'They don't provide cabs here after midnight.' I said, 'Madam, what are you going to do about it?' She replied, 'I am going to throw myself upon you.' Well, I landed her at her hotel in the upper part of the city at half-past 1 o'clock in the morning, and we have never met since that she does not say, 'What jolly fellows those Managers of the Pennsylvania Railroad were to give us such a nice long evening together.'

"Another reason why I do not wish to speak to-night much further is that I have consulted the Mayor of Philadelphia as to

the dinner hour here, and he gave me an hour which to my metropolitan ways (shall I say) sounded fearfully early, and I have learned in my profession never to speak to a hungry audience. Pope says :

“ ‘ The hungry judges soon the sentence sign,
And wretches hang that jury-men may dine.’ ”

“ I do not want to trust the voracious appetite of all Philadelphia. I have not any facts to tell you ; not a single statistic ; nor a single figure. I do not know but I have one figure, and for the lesson that is carried in it I give it to you. Mr. Frank Thomson, who, I believe, has something to do with the Pennsylvania Railroad, very liberally sent me a lot of these figures as the staple of my speech. I am obliged, but I find that he had given the same to all the six other gentlemen.

“ However, there is one that has not yet been mentioned. He said that if the wealth invested in this enterprise were to be converted into silver dollars they would form a double line of those somewhat doubtful coins 8000 miles in length. I confess that frightened me, for I thought my friend Thomson was going in for free coinage—nothing less could supply such a procession of silver dollars as that.

“ But I would like to have him tell me how many thousand miles of double gold eagles it would take to convert the property of this Company into miles of gold, for I tell you shareholders, with whom I am having this frank and confidential talk, that if ever your investment is converted into anything less staple than the double gold eagle your securities and stock will shrivel like parchment scrolls before a fire.

“ I never felt so poor as I do at this moment. I never was before such a rich audience as this. I believe about \$843,000,000 are all owned within the walls of this opera house. I think that meekness must be the prevailing trait of character of the Pennsylvania shareholders. ‘ Blessed are the meek, for they shall inherit the earth.’ I take it for granted, after what I have heard here to-night, that the Pennsylvania Railroad Company is the model railroad company of the world. But I beg you to consider, ladies and gentlemen, the happy owners of these shares, what would hap

pen if every other corporation in the land, after fifty years of its existence, could come before its stockholders, face to face, and give as good an account of its stewardship as these gentlemen have done to-day. What would there be left in the world—what would there be left in the world for those of us unfortunates who are not stockholders in any railroad? Why, all the gold and all the silver and all the iron and all the copper that ever was dug from the bowels of the earth, all the structures that have ever been erected on its surface, would not satisfy or furnish figures sufficient to meet the accumulated wealth of all the railroad companies if they were like the Pennsylvania.

“It is a great treat to any one born north of here to come once in a great while to Philadelphia. I was going to say something serious, and I think I will. I want to remind you of a great event that occurred here, second only in importance to the semi-centennial of the Pennsylvania Railroad Company, when the great men of the land met here to lay the foundation of this Union, and to form that Federal Constitution under which they proposed to secure the blessings of liberty for themselves and their children. Every loyal American has read the description of the closing day of that Convention.

“When the immortal document was completed, and Hamilton with his own hand had inscribed the names of the twelve States upon its last page, and all the signers had affixed their signatures, Franklin, looking at the sun that was emblazoned on the back of the President's chair, in which Washington sat, said: ‘In the vicissitudes of these debates I have often wondered whether it was a setting or a rising sun, but now I know it is a rising sun.’ But if Washington and Franklin, the wisest sages of those days, had been asked to explain how it was that they expected that that Constitution they were framing for a little community of 3,000,000 of people, inhabiting about 100 miles wide of seacoast strip, representing thirteen little and feeble States, should grow with the growth of the nation as the hide grows with the animal so as to be sufficient instead of for thirteen, for forty-five States, should hold together and govern with more than human wisdom a continent stretching 3000 miles from ocean to ocean, and 1400 miles from the lakes to the Gulf,

even their sanguine hopes would have hardly availed them to answer that question; and if they had been told that by and by, in the ordinary conduct of the affairs of the Government they were founding, it would be necessary to issue orders from Washington for immediate obedience and action on the Pacific coast, or even to move 100,000 troops in three days from the lakes to the defense of the beleaguered Capital, I fear that they, even, would have trembled at the audacity of that great experiment. Franklin certainly knew all that was worth knowing; all that steam, all that electricity had revealed up to that time was as familiar to him as household words; and if he ever dreamed how God and Nature were working for the great experiment that he and his associates were then trying, it was in the note that he wrote in the year following to his friend, Mr. Le Roy, from Philadelphia: 'There are no philosophic news here except that a little boat, without sails or oars, is stemming the current of our river by the aid of steam, and possibly, if the machinery can be simplified and the expense reduced, it may come to something some day or other.' Well, I am getting a little too historical, but I should hardly stand here to-night as a representative of the State of New York if I did not say something about De Witt Clinton.

"You know when the Erie Canal was finished the people of New York thought the world was finished. There had been all these struggles in the wilderness for locomotion. When the people got beyond the Alleghenies, no student of American history is ignorant that there was no reasonable prospect of holding them in as one nation with those on this side of the mountains. They set to work with their canals all over the country, and built I do not know how many thousand miles of canals, and expended a number of millions of dollars, and imagined—a vain thing!—that that was the end of all; that the lakes were wedded to the ocean, and the East to the West. It was on a day in October, 1825, that De Witt Clinton, then Governor of the State of New York, to whose energy and prescience that great enterprise was mainly due, started out on a canal boat, the 'Seneca Chief,' from Lake Erie, to make his way through the canal to New York. He was followed by a number of other canal boats containing other distinguished citizens, and one that was filled

with wild birds and beasts of the forest, to indicate the final triumph of man over Nature. As the boat entered the water of the canal a volley of artillery gave notice to a distant battery, and that to another, and so on along the banks of the canal down to the ocean, so that the news of the event was carried to the city of New York in eighty minutes, the best telegraph time made up to that date. Clinton and his party arrived in the harbor of New York at the end of nine days, and there he poured into the Atlantic a silver keg of the waters of Lake Erie, to symbolize the final accomplishment of locomotion in America and the wedding of the lakes to the ocean. You would not think I was doing justice to my nativity as a New Englander unless I quoted Emerson. I believe you are a people of so much leisure in Pennsylvania, and time hangs so heavily on your hands, that there are ten times as many people here that read Emerson as there are in New York, so you will recognize the quotation. He says: 'The true might of a man in every form of action is to hitch his wagon to a star and to see the gods do his chores without any labor of his own.' It is by making the elements ours that we become strong. Steam, electricity, magnets, all do the service of man without any charge whatever. This is just exactly what happened, and you will see the appositeness of that quotation. When the Pennsylvania Railroad was started Philadelphia hitched her wagon to a star, and ever since that she has been seeing the gods do her chores.

"How famished some of you look. I always say one or two things more, so that you can go to your steaming dinner tables thinking: Well, it was not so bad after all.

"The great poet has said that 'One touch of Nature makes the whole world kin.' It is this very touch of steam and electricity that binds together in harmonious union not the people of this continent alone, but of all the continents with which we daily communicate. It is the great peacemaker, and as long as they harmonize, sympathetic communion last, so long peace at home and abroad, the greatest interest of every people under the face of the sun, will last.

"Some of you are old enough to remember how you lived in Philadelphia fifty years ago, when you heard from New York or

Washington about once in a day or a day and a half; you heard from Europe once in two or three or possibly four weeks; from the antipodes four or five times a year; and from the western confines beyond the Rocky Mountains—never. And now every family in the land comes down to the breakfast table and takes a bird's-eye view of the whole globe. They learn and want to know what has been happening, while they were slumbering, in London, in Venezuela or in Japan; and if the tidings come that a little group of women have been massacred by the Turks, a thrill of horror runs through the land; if they learn that the long-lost boundary of Venezuela has been discovered they collapse with delight and joy. If they hear that our excellent President has given a little extra twist to the tail of the British lion, why, the roar of that amiable beast rouses them from their slumbers, and they cry with one voice, 'What is the matter with Grover?' If they hear that an American Ambassador has spoken too lightly at the banquet table, the wonder goes from the Bay of Fundy to the Gulf of California what they had to drink that night. I am merely indicating in these concrete forms the abstract idea of that universal sympathy which prevails and makes this people one in feeling, one in purpose, one in conducing to secure peace in all our borders and with all foreign lands. Administrations, Congresses, statesmen,* politicians may cry war, war, when there is and can be no war; and whoever, without just cause, would disturb this universal national and international harmony of mankind will be sure to receive in the end what he ought to have had at the beginning, the just condemnation of the people.

"I want to say a word about one man. I do not want to speak of the President; he has had altogether taffy enough. They told me before I came down to Philadelphia and made his acquaintance that he was one of the most modest men in this city. If that is so, he must have been very much shocked this afternoon. I wanted to speak of this new, brilliant, powerful, well-organized profession that has grown up here in the last fifty years to compete with the three learned professions that have held sway for centuries in Christendom. What a noble profession it is; what brains, what nerve, what courage, what intelligence, what integrity, what fidelity is de-

manded of it. They say the course of politics has driven away strong men from public life. The supply is always equal to the demand. There are brave men enough in Congress to do the talking there, but while they are talking where are the men that are doing and are going to make America what she is yet to be—the greatest nation on the face of the earth? Is it not these men who are harnessing the elements and driving and guiding them in the service of man? Is it not these men who are ribbing this continent with ribs of iron and steel that shall hold together the hearts of these 70,000,000 of people till time shall be no more?

“Is it not these men that are entering into the bowels of the earth and exhausting its resources so as to make the United States what she must be sooner or later, and I say sooner, and the sooner the better, absolutely independent of all other nations? So when you want to get a head for one of these great machines what do you do? You do not hunt him out among college graduates; you do not catch a bloated capitalist or make him all at once the master of the science of transportation; you do not try to catch a great lawyer or a great orator, only now and then, but you look for a man that entered the service of the Company as rodman in 1851 and worked his way up through every step of service from the bottom to the top; who learned all the details of the business, so that he could see how everything was done, and that it was done right; who learned all the secrets of your business and affairs, internal and external, and then, after thirty years, you make him President, and you give your absolute trust to him.”

At the close of Mr. Choate's oration Mr. Roberts said he desired on the part of the Directors and officers of the Company to extend their thanks to the speakers who had so kindly assisted in making this a fitting occasion for the fiftieth anniversary of the organization of the Company, and declared the meeting adjourned. The audience filed out speaking words of praise for all who contributed to making the golden jubilee such a successful event.

The day wound up by a dinner given to President Roberts by the Directors. Those present were the President, the three Vice Presidents, the Directors, with the exception of Mr. Cassatt, who

was abroad, and the special guests: Joseph H. Choate of New York; James McCrea, J. Twing Brooks, John E. Davidson and Jos. Wood, Pittsburgh, Vice Presidents of the Pennsylvania Company.

In closing this account of the Pennsylvania Railroad Company's jubilee, the highest meed of commendation should be given Mr. Shortridge and his Committee for the conception and execution of the plan, which, in its historic, forensic and social features, made the celebration one of the noted events of this country.



S. V. MERRICK

CHAPTER X.

IN MEMORIAM.

SAMUEL VAUGHAN MERRICK.

WITHIN a period of fifty years from the time the Charter of the Pennsylvania Railroad was granted the wonderful development of the railroad, with its great improvements in transportation and advancement in the luxury, safety and stability of its equipment, has taken place. These achievements, so far as the Pennsylvania Railroad is concerned, took place during five distinct periods, and under the direction of five Presidents, each in his own way and own time pre-eminently qualified for his position. The periods were: Promotion, construction, organization, expansion, and development and preservation; and the Presidents, in their order: Samuel Vaughan Merrick, William Chamberlain Patterson, John Edgar Thomson, Thomas Alexander Scott and George Brooke Roberts.

These Presidents, possessing all the attributes necessary for ruling communities—knowledge, wisdom, judgment, liberality, keen insight, deft diplomacy, coolness, patience and industry—added to personal purity, would have made as wise and strong rulers of a nation as any that have been recorded on the pages of history; and yet they were modest, unassuming men, aspiring to neither place nor power. Nor have they at any time allowed the power and influence of the corporation to be used by any one for the furtherance of ambitious designs in partisan political contests.

The charter was granted to the Pennsylvania Railroad Company on February 25, 1847. A man of large experience in business and public affairs was a recognized necessity to carry forward the project and head the enterprise. For this reason Mr. Merrick was called to the Presidency. He had been at the head of the Franklin In-

stitute, had erected, as agent of the city, the gas works, and was at the head of the largest manufacturing establishment in the city. He possessed a great deal of practical knowledge of engineering, and was a man who stood so high in the community that he inspired confidence in the undertaking. He devoted his time and energies to the enterprise, but when it was well under way, money for construction fairly in sight, and the work actively progressing, he relinquished the office, although continuing to take an active interest in the Company's affairs and prosperity without shouldering the official responsibilities. At that period (1847) the wise movement of the Board in electing Mr. Thomson Chief Engineer of the road stamped the enterprise with a solidity of character which has made it remarkable above all railroad corporations. The profession of the engineer as we recognize it to-day was not then known, and the fact is that it is a profession created by the necessities for railroads, and it is another fact that railroads were created by the genius of men in whom the science of engineering was in-born. Mr. Thomson was of that class, and withal was a man of rare and well-matured judgment, and the one man of special experience for the work to which he was called.

Samuel Vaughan Merrick, born at Hallowell, Maine, on May 4, 1801, and who died at Philadelphia, August 18, 1870, was the son of John Merrick, an English gentleman of education and refinement, who came to this country in 1798. His mother was a daughter of Samuel Vaughan, a prosperous merchant of London. His mother's brother John had settled in Philadelphia, where he was not only a leading citizen, but a leading merchant, and to him Mr. Merrick was sent when but fifteen years of age to be trained as a wine merchant. In 1820, notwithstanding at that time the position of mechanic was looked upon as one beneath that of merchant, Mr. Merrick braved the terrors of threatened social ostracism and entered into partnership with Mr. Agnew in the manufacture of improved fire engines, and from that time until his death he was an important factor in building up Philadelphia as a great manufacturing as well as commercial city, and the handiwork of his own establishment found its way into the possession of the city, State and nation. By unflagging industry and unbending in-

tegrity he reached a proud position in the city of his adoption, and was always to be found in the lead in whatever promised to advance his fellow-man and country. He was elected to the Presidency of the Pennsylvania Railroad Company on March 31, 1847, and accepted the position, feeling the absolute necessity of the road to the trade of Philadelphia. The success of the construction of the road was largely due to his efforts, and he only laid down the Presidency on September 1, 1849, when that success was assured, as previously stated. Mr. Merrick took no further official position, other than Director in corporations for the furtherance of Philadelphia's transportation interests, until 1856. In that year the Sunbury and Erie Railroad Company, which was expected to open up the lumber fields of the Susquehanna and the business of the Great Lakes to the trade of Philadelphia, was on the verge of bankruptcy. In the emergency all appeals were turned to Mr. Merrick, and he was called upon by his fellow-citizens to organize an administration and adopt financial and other plans so as to secure confidence of investors and obtain financial aid. He accepted the Presidency of the Company on the 23d of February, 1856, and whilst he was in the midst of his labors in straightening out its tangled affairs the commercial crisis of 1857 swept over the land, and he only saved the Company from absolute bankruptcy by putting his private funds into the breach. For fourteen years he was a Director of the Catawissa Road, and during that period his wise counsels and vigorous policy kept the affairs of that corporation in a sound condition. Among the other positions he occupied was Manager of the Western Savings Fund Society, member of the Board of Trade, of the Board of Port Wardens and of the Board of Commissioners for the erection of South Street Bridge, of the Philosophical Society, and the Franklin Institute, which he founded. He was a consistent Christian, attached to the Episcopal Church, active in its benevolences and charities, and one of the Wardens of Grace Church.

The late Rev. Dr. D. R. Goodwin, in summing up his character, said: "He was a man of quick perception, of clear intelligence, of singular forecast, of large and liberal views, of rare sagacity, of imperious, even overbearing, will, and of indomitable energy; a just man, of honorable sentiments, of strict integrity, to be trusted any-

where and in anything, faithful in the least and in the greatest alike; a man of a kindly nature, of ready sympathy, instinctively and in principle benevolent, always benevolent—his benevolence was not stinted by increasing years nor by increasing wealth, but grew rather with his means and his habit of exercising it; a man of ardent patriotism, he identified his own life with that of his country; of an ever-generous and ready public spirit, he was in all relations a good citizen; religious, not without profession, but without cant, and beneficent without ostentation; his character, like his person, was of a noble and massive, rather than of a graceful make. He was every inch a man."

WILLIAM C. PATTERSON.

William Chamberlain Patterson, son of Francis and Ann Graham Patterson, was born in Claiborne County, Tenn., February 1, 1813, and of that Scotch-Irish stock which has done so much for this country. His father was "out" in the Rebellion of 1798 under the leadership of Theobald Wolfe Tone, and fled to this country with the wreck of his possessions after the collapse of that brave effort for independence. His mother was a Graham, the men of whose family in Ireland were also "out" in that Rebellion. Other Grahams had come to this country in time to help in our Revolution, one of them, a clergyman, having a school called "Liberty Hall," which Washington mentions in his will because of the distinguished services rendered our country by its students. In fact, it was the nucleus of Washington College, Virginia.

With the inheritance of excellent traditions there came little money to the sons of this couple. They had "early to fend for themselves," which they did most capably; at their father's death they were in a position to turn over his entire estate to their sisters, and by their own capacity and integrity had made for themselves a position in the City of Philadelphia of which their descendants are to-day proud. The estimation in which he was held in the community was indicated when, with Eli K. Price, he was chosen to manage the bill for the consolidation of the City and County of Philadelphia. They went to Harrisburg and succeeded in effecting the consolidation with credit to themselves and economy to the city.



W. C. PATTERSON

When the Mexican war broke out he offered the 102d Regiment of Pennsylvania Volunteers for immediate service. When it was declined, the State's quota being already completed, he resigned his commission from mortification at being, as he said, "a paper colonel;" but he left an admirable record, not only in the condition of the regiment, but in the personal affection of his men, as many of them can still testify.

When the Bank of Pennsylvania came to grief, William C. Patterson settled its tangled affairs with wonderful rapidity, and with much less loss than had been deemed possible.

He was associated with his brother in business, and had acquired a large fortune, so that when a person of ability, with high personal and commercial standing, was looked for to take up the work laid down by Mr. Merrick, he was selected. His election to the Presidency took place September 1, 1849, and he served until 1852. During his term of service the road was placed on a firmer financial basis. Many improvements were made, and much valuable property acquired, prominently the Powelton tract, now occupied by the West Philadelphia Yards, and the O'Hara land, now the great Pittsburgh Yards. A difference between him and others relative to the financial and business policy of the road having arisen, involving the suspension of construction, a spirited controversy took place, which culminated in the election of Mr. Thomson on the 3d of February, 1852.

The Union Trust Company was organized by him, and it was his intention to enlist the officers and agents of the Pennsylvania Railroad Company in aiding to make it the saving fund for the savings of the Company's employees, and there is scarcely a doubt but that our present admirable Saving Fund grew out of the ideas he advanced when he was projecting the Union Trust Company.

During our Civil War he served as aid on the staff of his brother, General Robert Patterson, without pay or uniform—the "Quaker Colonel" as he was called, from his plain business suit. During his three months' service he faced many relatives bravely struggling for the "Lost Cause."

Colonel Patterson was the owner of the large bonded warehouse at Front and Lombard streets, which, together with its contents,

was destroyed by fire August 4, 1869, involving a loss of over \$2,000,000. This disaster ruined the fine estate his own brain and forethought had built up. His personal credit, which had stood high for a generation in the business world of Philadelphia, remained unshaken.

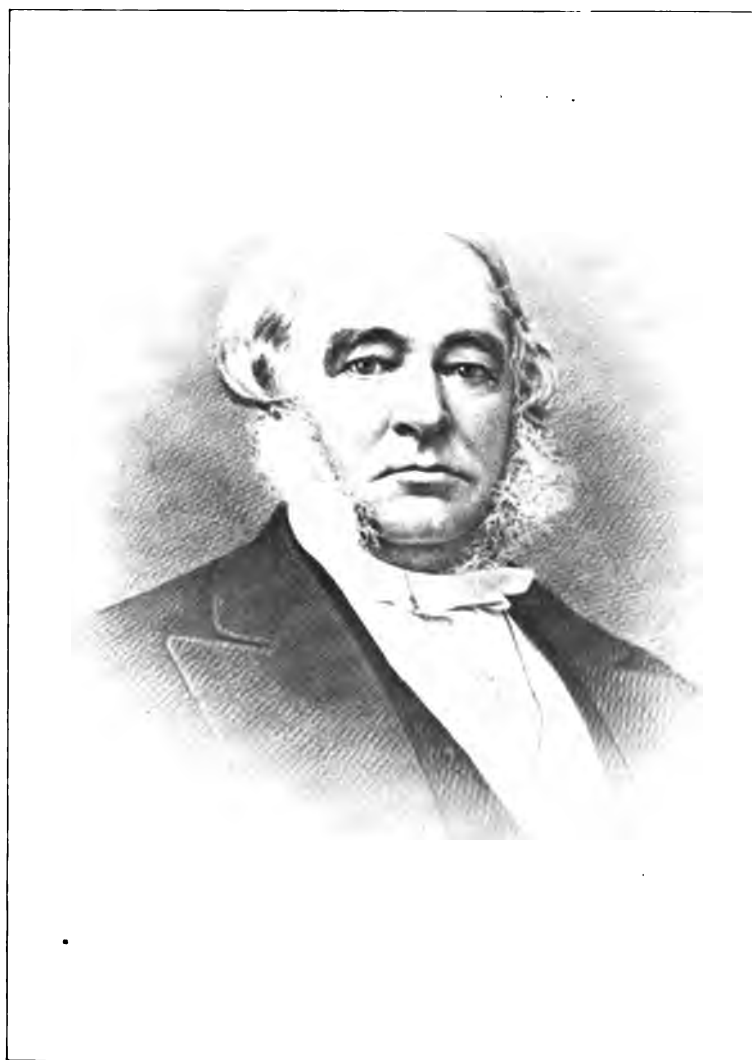
He had been educated at old Bohnar's school, where so many distinguished Philadelphians of that day received their training. He was a handsome man, of fine physique and superb health, of refined and scholarly tastes, wide travel and agreeable manner, and retained to the last a keen sympathy for the young.

One strong point in his character should not go unmentioned—his readiness to help others with money and with influence. Many a man in comfortable circumstances to-day can thank him for it—and in no way did he ever show that he thought of it again. He had much love and admiration in his private life, and the good that he did lives after him. He died June 20, 1883, his last illness being caused by a fall from his horse.

JOHN EDGAR THOMSON.

John Edgar Thomson, son of John Thomson, was born in Delaware County, Pa., on February 10, 1808. He was educated principally by his father, who was a man of note in his neighborhood. When nineteen years of age, or in 1827, he began his railroad career, becoming a member of the Engineer Corps which made the original surveys of the old Philadelphia and Columbia Railroad, by appointment from the Secretary of the Board of Canal Commissioners.

From that time on until his death on the 27th of May, 1874, a period of forty-seven years, he continued in the same line of duty, rising by merit alone to the first position in his line of service in America, probably in the world. In 1830 he was Assistant Engineer Eastern Division, Camden and Amboy Railroad. Then, after a brief visit to Europe, he returned, and in 1832 was made Chief Engineer of the Georgia Railroad, extending from Augusta to Atlanta, with a branch to Athens, in all 213 miles, the longest line which up to that time had ever been under the control of one company in the United States. He continued with the Georgia Rail-



J. EDGAR THOMSON

road until 1847, when he was elected Chief Engineer of the Pennsylvania Railroad, from which he was promoted February 3, 1852, to the Presidency. Upon assuming the latter position he immediately began organizing the road for business, and the rules and regulations he then laid down formed the basis for the magnificent organization of to-day, with its fidelity to duty and unsurpassable *esprit de corps*. Mr. Thomson was in no sense a martinet, but his appreciation of regularity and order inclined his mind to an organization along military lines. His policy at the outset was to keep as free of debt as possible, build well, but pay as you go. Expansion of his line by direct control of the tributaries did not become a part of his policy until late in the sixties. Prior to that he assisted tributaries and secured trade through traffic contracts, but spirited competition caused him to change and adopt the policy of obtaining the control of those lines. The outcome of the steady pursuit of that policy has been the uniting of the Atlantic Seaboard and the Capital of the Union to the lakes and the Mississippi Valley by unequaled corporate property under the management of one head. He did more than any one man to establish, create and perfect the railway system of the American continent. Mr. Thomson was a man of splendid physique, and led a life of marked regularity; but a quarter of a century of well-directed efforts, whilst bringing prosperity to the road, so taxed that physique that, powerful as it was, it had to yield to the demands made upon it, and his eyes closed in death. His splendid mind remained unclouded to the last.

Mr. Thomson was a man of reserve and sparing of speech, and kept his thoughts and opinions largely to himself. He was a patient listener, absorbing freely the knowledge brought to him by others, but only reaching his conclusions based on such knowledge after calm and thoughtful reasoning. It has been truly said of him, "but when his conclusions were reached, and the emergency required it, he became grandly enterprising, and permitted no obstacle to stand in the way of success."

His accuracy as an Engineer was phenomenal, as is witnessed by the following fact: Upon the completion of the Eastern Division of the road, embracing a fraction over 137 miles of railway and in-

volving the expenditure of more than \$4,000,000, the *actual* cost only exceeded Mr. Thomson's first estimate by \$10,000.

William B. Sipes, in the "Pennsylvania Railroad, Historical and Descriptive," has this tribute of him :

"To the American people his death, though not unexpected, came as a calamity. It was felt that the foremost man in the greatest industrial system of the continent had fallen. Clearly was it demonstrated that John Edgar Thomson had no enemies. Rivalries had been engendered by his indomitable energy, jealousies had grown out of his almost unvarying triumphs. Envy may have planted its sting in the breasts of some who had been distanced in the race, but not one shaft of malice was aimed at the man who lay in calm repose that comes to all the weary—not one word of detraction was whispered over the narrow bed in which the exhausted leader had found rest. His untarnished honor was conceded by all ; his unbending justice was everywhere admitted ; his mental greatness and acquired abilities were unquestionable ; his usefulness and energy as a Director of the nation's material progress were not denied. The whole English-speaking world pointed with pride to the career of the man who for so many years had controlled millions of property intrusted to his management by others, and had never for one moment been faithless to his trust or forfeited the confidence of those who trusted him."

The records of the Company cannot be read without the reader being profoundly impressed with the truth that, notwithstanding the signal ability which, in the domains of finance, care, expansion and operating has marked the course of the Company's triumphant and successful march, the great central figure, standing pre-eminent, powerful and alone as the genius of civil engineering, and suggesting the best methods of successful mountain climbing, is that of John Edgar Thomson.

The routes west of the Alleghenies, since occupied by railroads, had been opened in the last century in the efforts of the Virginians and Marylanders in the South, the Pennsylvanians in the centre, and the Canadians in the North, to reach the forks of the Ohio and secure the trade of that region. Washington marked the route up the Potomac to Cumberland, thence to Fort Duquesne. Several

years later, on the Forbes expedition, Colonel Boquet had marked out a route from Bedford via Bushy Creek to the same point, and earlier Jack Anderson had opened a path along the Juniata and Conemaugh to the forks of the river, whilst the Canadians had come through Lake Ontario and Lake Erie and crossed the country to the Allegheny at Warren, thence down that river to the forks; but it was reserved for Mr. Thomson to make the shortest and best route to the end that traffic going over it should not be handicapped by great expense in passing the mountains, and the possibilities of the Pennsylvania Railroad Company offering the best of transportation at the lowest possible cost is due to that fact.

His achievement was the greatest triumph of the century, and its effects were ably and eloquently presented on the day of jubilee. Philadelphia, Pennsylvania and the United States should be proud of that man, and esteem him as one of the foremost men of his time.

In the galleries of art, amidst statuary in the public places and the adornment of the Park, the gratitude of Philadelphia should cause it to preserve on canvas, in the purest of marble, and the most stately of memorial buildings, the features, fame, name and worth of John Edgar Thomson, by whose merit there has been erected on the foundation of Penn, as if by magic, a magnificent city, whose spires and elevated buildings sparkle like diamonds as they are reflected from the waters of the Delaware River.

The State of Pennsylvania should erect a monument to his memory at Harrisburg. From the dome of the Capitol can be seen the spot where this superb Engineer spanned the Susquehanna with his line, and gave practical application to the expression, "Westward the course of empire takes its way," as he extended it on and on, through valley, across stream, and over mountain, until the Delaware and the Susquehanna were united to the Ohio, and the Commonwealth, roused from its slumbers, aided in entering upon an era of unexampled prosperity.

In Statuary Hall in the National Capitol at Washington his effigy in bronze or marble should stand side by side with Fulton and Muhlenberg, those other distinguished sons of Pennsylvania,

for he it was that led the way in American railroad development, a development that, as has been aptly said, drove the last nail in the coffin of slavery, and a development that in the hour of trial saved the Government from disintegration.

THOMAS A. SCOTT.

Thomas Alexander Scott, who, whether in peace or war, was a prominent citizen in advancing his country's prosperity or defending its rights, was born on the 28th of December, 1824, in the romantic village of Loudon, which nestles among the mountains of Franklin County, Pa. What little schooling he had the advantage of was received in that village. His father dying when he was ten years old, and the necessity for self-support ensuing, he entered a country store as clerk. That life not meeting the demands of his energetic nature, he went to Columbia, where his brother-in-law, Major Patton, was Collector of Tolls on the Public Works, and accepted a clerkship under him at the Outlet Lock. He entered on that service August 1, 1841, before he was seventeen years old, and continued in it until 1847, when he went to West Philadelphia, having been promoted to a clerkship in the office of Collector of Tolls there. In 1850 he entered the service of the Pennsylvania Railroad as Station Agent at Duncansville. In that position he displayed such wonderful mastery of men and great ability for overcoming obstacles that when Mr. Thomson organized the road for business in 1852 he appointed Mr. Scott as Third Assistant Superintendent, and placed him in charge of the Western Division, with headquarters at Pittsburgh. The wise manner in which he administered affairs there, eradicating the prejudices and ill-will engendered in that city by the repeal of the Baltimore and Ohio privileges, and in bringing his Division up to a high standard of excellence, brought about his promotion to the General Superintendency on January 1, 1858.

In 1860, on the death of William B. Foster, Jr., he was called to the Vice Presidency. Here was effected that union which was so advantageous to the Company. The foresight and mental grasp of Mr. Thomson, joined to Mr. Scott's executive ability, made a harmonious combination always effective for the accomplishing of necessary plans in the interest of the road's advancement. Moving



THOMAS A. SCOTT

along the lines with Mr. Thomson, every foot of the road's progress bore marks of his efforts. As an executive officer he was quick in conception and dazzling in action, and his influence on any body of men was supreme. The executive, the judiciary and the legislative all came under his magic power whenever he had anything necessary for his road to ask for; but it was reserved for the Civil War to bring out the full powers of his unmatched management of men, and his ability to deal with events of the greatest magnitude. The war was an exceptional one, requiring exceptional men for exceptional deeds, and there was not brought to the foreground by it a more striking figure than Thomas A. Scott. Only thirty-seven years of age, a model of physical health and strength—alert, active and untiring, possessed of a perfect memory, an almost inexhaustible fund of knowledge, and an absolute confidence in his own abilities, coupled to a temperament that never heated and a charm of manner that never varied, he was an ideal leader. It is not surprising that on his arrival in Washington on the opening of May, 1861, he gave evidence of the highest abilities, and surprised not only his friends, but astonished statesmen, warriors and diplomats with his familiarity with their crafts, whilst displaying a masterful supremacy in his own. The powers the President and Secretary of War clothed him with were unlimited, and practically made him a dictator, so far as railroads and telegraphs were concerned; and yet such arbitrary power was entirely safe in his hands, for he knew how to use it and was not constituted to exercise its abuse. After he was appointed Assistant Secretary of War, business accumulated very rapidly, but it seemed not to call up a ripple of care to him—he dispatched it with a rapidity and precision that would have caused Napoleon to blush with envy. His office door was always open, and daily crowds of people passed before him, each presenting his own peculiar claim, civil, military or personal, receiving polite consideration from him, while at the same time he was attending to a voluminous correspondence on his desk or receiving reports from army headquarters and Chiefs of Bureaus. One day the Prince de Joinville, accompanied by his nephews, Philip, Comte de Paris and Robert d'Orleans, Duc de Chartres, was standing in Colonel Scott's office, and seeing a display of his per-

sonal capacity for work under the above circumstances, turned to Secretary Seward, who was with him, and said, referring to the Colonel: "He is without a parallel in the world."

On the night of the Battle of Bull Run, when higher officials of the Government and the army rulers were almost paralyzed by the defeat, Colonel Scott displayed rare abilities in organizing the defense of the Capital, and in his preparations for staying the retreat of our army. General Winfield Scott looked on in wonder, and wished to place him in high command in the army; but like on all occasions, particularly when Mr. Lincoln wanted him for Secretary of War at the time Simon Cameron laid down that portfolio, declining, he turned away from the allurements, remarking that the work on his "little railroad over in Pennsylvania furnished sufficient fuel for his ambitions."

He resigned his position as Assistant Secretary of War on the 1st of June, 1862; but notwithstanding that fact, whenever the emergency arose, either in the State or nation, his services were always called for and freely granted. To Governor Curtin and President Lincoln he was a pillar of strength upon which they leaned in hours of trial, such as were occasioned during the Antietam and Gettysburg campaigns, the transfer of two army corps from the seaboard to the mountains of Tennessee, and Early's raid.

A short time after his death, General Simon Cameron, in speaking of Colonel Scott, paid him this tribute:

"No man in America, in my judgment, could in that day have fulfilled the requirements of the situation as Colonel Thomas A. Scott did. It needed an individual of untiring energy, quick decision and great nerve to deal with the every-day requirements of the situation, and no man possessed all these requirements in such a degree as he did. It had been a part of my policy at the beginning of the war not only to take and operate railroads in the enemy's country, but to build lines of railway to follow the army as nearly as practicable. Most of our old army officers thought this could not be done, but Colonel Scott demonstrated its entire feasibility almost at the beginning of his career as a military railway manager. In an incredibly short space of time after he came to the Department he had his office placed in telegraphic communication with all

the army stations that could be reached, and with every telegraph station in every loyal State of the North. He had great responsibilities, and a great work to do. I had taken possession of the Baltimore and Ohio Railroad before his arrival, which, of course, passed under his management as soon as he assumed charge. He then built a line of railway through the streets of Washington to the Long Bridge, so as to make a direct connection with the Orange and Alexandria Railroad beyond Alexandria. In less than a month he had so systematized his portion of the duties of the Department that he could tell the capacity for transportation toward every division of the army. His marvelous mastery of details, connected with his business qualities and his power to reach your judgment almost without explanation, was one of the characteristics of his mind which served to make him in many respects the greatest railroad manager that ever lived in this country."

His devotion to duty on the railroad seemed to have been stimulated by his war experiences, and he performed a prodigious amount of work in expanding, developing and cementing together its interests.

On June 3, 1874, he was elected President to succeed Mr. Thomson, then recently deceased, and conducted the affairs of the Company with great success. He continued in office until June 1, 1880, when, on account of sadly impaired health, he resigned. May 21, 1881, his work ended and he entered upon his rest.

His military rank of Colonel was conferred upon him by President Lincoln, and on May 3, 1861, he was mustered into the service of the United States as Colonel of the District of Columbia Volunteers. His name stands first on the list of such officers.

His success in life was due to his native ability and forceful character. One of his greatest triumphs over most formidable opposition was the carrying his line into Washington, D. C., partly over and through a Government reservation, and planting his passenger station practically on Pennsylvania avenue at Sixth street. Whilst the question of granting the privilege was pending, he appeared before the Congressional Committee and made a most convincing ar-

gument, in the delivery of which he displayed such unexpected powers of oratory and carried his reasoning over such a breadth of field that he kept the rapt attention of his hearers from the opening to the close, and secured what he was contending for.

With the death of Thomas A. Scott the light of one of the brightest planets in the railroad firmament went out.

GEORGE BROOKE ROBERTS.

George Brooke Roberts was born January 15, 1833, on the "Pencoed Farm," now "Bala," Montgomery County, Pennsylvania. The house in which he was born also witnessed his death. It is the ancestral home of the family, and founded by John Roberts in 1683, shortly after his arrival in America from "Bala," the ancestral seat of the family in Merionethshire, Wales. The property has never passed out of the possession of the family. Mr. Roberts was proud of his Welsh descent and the old farm, and for that reason gave the name of the Welsh home to the American one, as well as to the adjoining station on the Schuylkill Valley Railroad on the northwestern edge of Fairmount Park. He received his early education in the schools of the neighborhood and afterwards took a technical course in the Rensselaer Institute at Troy, New York, from which he received his diploma in 1849.

Two years subsequently, when eighteen years of age, he began his railroad career as rodman in an Engineer Corps then engaged in the construction of the mountain division of the Pennsylvania Railroad. In the succeeding year he became Assistant Engineer on the Sunbury and Erie Railroad. From that time on until 1862 he was actively engaged in locating and constructing various railroads. These included, in addition to the Sunbury and Erie, the North Pennsylvania, the Allentown and Auburn, the Mahanoy and Broad Mountain, the West Jersey and other roads, many of which he completed as Chief Engineer. In 1862 Mr. J. Edgar Thomson recalled him to the service of the Pennsylvania Railroad Company and installed him as Assistant to the President. Then began that development in him which has proven of so much advantage to the corporation and community. In 1869 he was advanced to the



GEORGE B. ROBERTS

Fourth, and soon afterwards to the Second Vice Presidency. Upon the election of Mr. Scott to the Presidency in 1874 Mr. Roberts was promoted to the position of First Vice President, and in that position assisted the President in all business pertaining to the leased or controlled roads. In addition he had charge of all engineering matters relating to the construction, extension and improvement of the Company's lines, and a general supervision of its accounts. On the resignation of President Scott on June 1, 1880, he was elected to fill the vacancy.

The announcement of his death, which occurred at Bala, Montgomery County, Pennsylvania, at half-past four o'clock on Saturday afternoon, January 30, 1897, called forth throughout America, in the capitals of Europe and at business centres elsewhere, deep expressions of regret. No man, surely no American, possessed in a greater degree the confidence in his personal integrity and financial ability than that which was universally reposed in him. One of the foremost men of his time, his career was guided by his strong, sincere and unselfish character, and he has so embedded his great personality in the life of the Company whose destinies he aided in shaping that his influence will long be felt in its activities.

Although a devoted Churchman, he was a fine specimen of Quaker stock, and possessed the leading traits of those people—simplicity, sincerity, probity and honor. It is but to know that fact to understand the source from whence his great strength came. An embodiment of truth, falsehood shrank before him.

During his administration an immense work was done in the construction of additional tracks, the improvement of equipment and terminals, in the reduction of grades, elimination of grade crossings, and in other directions that tend to reduce operating expenses. Among many of his achievements may also be noted the bringing into the Pennsylvania system the Philadelphia, Wilmington and Baltimore Railroad, the connecting link between Philadelphia and the South, and between the National Capital and the entire Pennsylvania territory. The difficulties which had to be overcome in thus intrenching on territory that had so long been exclusively held by another corporation called forth Mr. Roberts' best efforts in diplomacy and generalship, the result adding the cope-stone to

the similarly successful effort of Mr. Roberts' predecessor in carrying the Baltimore and Potomac tracks through the Government reservation into the very heart of the City of Washington. Mr. Roberts supplemented all this with a system of contracts with Southern freight lines which secured to the Pennsylvania Railroad a perfect system of traffic all down the Atlantic coast. The paralleling of the Reading line by the Schuylkill Valley Railroad was also among the many. So, too, were the construction of the elevated roads and passenger stations at Jersey City and Philadelphia, the building of the Delaware River Bridge, the Germantown and Chestnut Hill and the Trenton Cut-off Roads.

His skill as an Engineer, his abilities as an administrative officer and his genius as a financier marked his career as President with brilliant success, and placed the Pennsylvania Railroad in the proud position it now occupies. No other road enjoys so great public confidence.

Had he done nothing else, the task of keeping the great system in sound condition and smooth working order, ever abreast of the increasing demands of travel and traffic and the constant improvements of the age, and yet never drifting beyond the clear channel of financial security, would have given him his prominence. In addition to being President of the Pennsylvania Railroad Company, he was also President of the Pennsylvania Company, operating the lines west of Pittsburgh; of the Pittsburgh, Cincinnati, Chicago and St. Louis Railway Company; of the Chicago, St. Louis and Pittsburgh Railroad Company—the three main organizations that operate the Western system of the Pennsylvania Railroad—and also of a very large number of subordinate corporations. In all these enterprises, in so far as his power made it possible, he raised them to the same standard of acknowledged excellence as that established on the Pennsylvania road.

The position of President of the Pennsylvania Railroad Company, with its vast continental interests, has no parallel in responsibility, and to maintain it properly requires work of herculean magnitude from the occupant. The strain is unending, but Mr. Roberts, delicately constructed though he was, bore up under the burden heroically. He was of simple, regular habits, and his industry was tire-

less. Democratic in character, access to him was without a barrier. He was exact in all things, and demanded exactness from others. Yet his demands were accompanied by so much kindness of manner and thoughtful care, that on leaving his presence with an order to perform some duty it was always with a feeling that he had just conferred a favor. He was an attentive listener, an incisive questioner and a keen observer. His judgments were formed with deliberation, and his decisions invariably just. Although he moved through life in an apparently passive manner, and pursued generally a defensive policy, it must not be inferred that he was not aggressive. When occasion demanded it he became very aggressive, and in a way that produced the best results. When financial heresy raised its head and threatened destruction to National honor, it was his voice, with no uncertain sound, that raised the alarm, awakened the conservative people of the country to the danger that menaced them, and summoned them to the field in defense of financial honesty.

At a public meeting to take action in favor of sound money, which was held in the Academy of Music, Philadelphia, on the evening of May 28, 1895, and at which one of the largest audiences was in attendance that ever sought entrance to that historic building, Mr. Roberts was called upon to preside, and in taking the chair made the following remarks :

"Ladies, Gentlemen and Fellow-Citizens : I do not know why so great an honor should be conferred upon me to-night as that of presiding at so important a meeting ; but probably it is from the fact that during my life I have been connected with the employment of more labor than falls to the ordinary lot of man. The subject before us is one that more nearly touches the pocket of the laboring man than that of any other class of citizens ; and it is due to the laborer, to whom we owe our prosperity, that we should devote the whole of our intelligence to the endeavor to protect him. We cannot expect that they should be as thoroughly informed upon this matter as those who have been intrusted with the management of financial affairs all their lives ; and should we fail to explain clearly to them that which is so closely identified with their

prosperity and the securing of a proper return for their labor, we fail to do what I conceive to be the duty of all good citizens.

"It is certainly a sad thing that in a country like ours, which has always claimed a position of the highest moral integrity, it should be necessary to call public meetings throughout the land to teach the people the duty of preserving a standard of moral integrity in their coin. But, unfortunately, from the remotest times, whenever a people has desired to do that which was unfair or unjust to others, it has always attempted to recompense them with something which only represented in actual value about one-half of the debt. It is this subject that brings us here to-night. If we admit for one moment that anything less than a dollar, representing one hundred cents in actual value, is to be the coin with which to reimburse the laborer, to whom we have agreed to pay a dollar for his day's labor, and in its place we hand him a piece of white metal which is merely a token and represents but one-half of that value, then and there we fail to do that which is right between man and man.

"I tell you, fellow-laborers, that when you find that the dollar or dollar and a half which you receive for your day's labor, or, if you are a skilled laborer, the three, five or ten dollars which you receive will buy you but one-half the amount of flour, or one-half the amount of wheat, or one-half the amount of beef that you can buy at present, then you will begin to ask what does all this mean, and to realize that while money truly is plenty, its value is gone.

"Now, gentlemen, I have detained you longer on this subject than I intended, because I will be followed by speakers who are more gifted, and have a better and closer knowledge of this subject than I have. It is only in a crude way that it presents itself to me, but I know that the wages of the laborer, so dear to him and so hard to earn, will be cut in half the moment you admit the free coinage of silver. No longer will that which he will be compelled to receive serve the purpose of the present dollar. Its purchasing power is gone—gone at home, gone abroad—and those who try to make you believe that money will be made plenty by making it cheap, deceive you. Money is not a token; money is value. And

the moment you undertake to make the token cheap, that moment do you make real money scarce. If their contention be true, why take silver? Why not take oyster shells, or anything else that has some commercial value, make that a token, and endeavor to put that out and call it money. Never. The moment you call that money, and endeavor to make it so, real money becomes scarce, and you have no longer any of it."

From this time on Mr. Roberts' influence was exerted in stemming the tide that was beating against the bulwarks of the country's integrity. Early in the spring of 1896, anticipating the political leaders in starting the great battle of that year, he urged the persons who were to be delegates to the National Conventions of both the Republican and Democratic parties to consider the currency before they considered candidates, and in an interview upon the subject said: "Matters will right themselves, and we shall have prosperity if we have the assurance of sound money and non-interference in foreign affairs. The great need of the business world just now is a sound currency system. I cannot emphasize the importance of this statement too strongly. We must get to a sound money basis as soon as possible. Business lags, commerce lags, in short, everything seems almost at a standstill. There is a marvelous unrest in the country which is reflected in every branch of business. The free silver cry shatters confidence at home and abroad, and paralyzes all prospects of a revival of trade." Others followed where he led, and the result was as he wished.

Always reluctant about giving his views on public questions, yet as necessity arose he did not hesitate in appearing and presenting them in clear, plain words, and with a sincerity of utterance that carried conviction with it. On the subject of governmental control of railroads his views were very pronounced. He looked upon the proposition as an absolute absurdity, and did not believe that any man, no matter what laws might be passed to aid him, could successfully manage the entire transportation business of the United States. He clearly outlined the injury to the public welfare that would follow operating railroads by men selected for partisan political reasons. In contrast with veteran railroad employees, whose long service perfected efficiency, the capacity of government em-

ployees, with an uncertain tenure of employment, to manage the business, did not inspire him with faith. In speaking on this subject he said: "In railroad management the rules of true civil service reform at first applied to the President and Board of Managers, and then down to the common laborer on the road, whereas in the public service it usually begins with the clerks and stops before going much further."

In an address before the Contemporary Club in Philadelphia, January 12, 1892, he elaborated his views on the question, and expressed in the following language his surprise at the position taken by certain civil service reformers who were advocating governmental control of railroads:

"It is well that a railway president should state before a body like the Contemporary Club facts that are often ignored by civil service reformers. Should the control of the railways pass into the hands of the Government, the patronage of the administration would be greatly increased. From the past and present it is easy to tell the result should this experiment be tried in the future. Several commonwealths have discovered the operation of public works to be inefficient and costly. From the old communities of Europe and the newly settled regions of Australia comes strong evidence that government railways are often gross failures, and, at best, only partial successes. The countries where governmental control is most firmly established are countries where military conditions outweigh commercial conditions, where a thriving town is passed over to obtain communication with a lonely fortress. New York's canals have been a topic of discussion for many years, and grave charges have been brought against the management. In Ohio, Governor McKinley says in his inaugural that 'the canals have been preyed upon and allowed to go to ruin, and now every succeeding Legislature refuses to appropriate enough money to put them in proper condition. The question does not involve appropriations alone, but the modernization of public waterways. Not only experts, but the public at large, have arrived at the conclusion that if the canals are to be continued there must be some well-matured plan for their improvement in the interest of cheap and better transportation.'

The Governor's evident reluctance to see the State abandon her canals does not prevent him from emphasizing the bad management of the past. He asserts that 'the canal system of Ohio is a rich heritage to the State which has been largely squandered. It is time to call a halt to the policy of disposing of the people's property without adequate compensation.' From other portions of the inaugural it is plain that a strong sentiment favors the relinquishment of the franchises appertaining to the Miami and Erie Canal and the Ohio Canal. Accepting the Governor as authority, the management of the Ohio canals has not been the brightest page in the Buckeye archives. Like testimony comes from every country and State that has tried to control important public works. Oftentimes the history of such undertakings might be summed up in two words, partisanship and peculation. When the throngs of men employed and the vast amounts of wages to be paid are considered, no one need be surprised that political workers think governmental control of railways a sound policy—at least when their party is likely to distribute the patronage. There is, however, cause for surprise when those who label themselves civil service reformers argue for a policy that inevitably strengthens the spoilsman. No one with the slightest knowledge of American history is unaware that government buildings and navy yards have been used as cogs and wheels in political machines. Federal, State and municipal administrations have repeatedly used patronage as a means to an end, and that end was not the well-being of the public, but success at the polls. Every satirist of the American press has called attention to the number of additional workmen engaged shortly before election. Yet men who bewail the fact that clerks and postmasters have been appointed for partisan reasons ceaselessly advocate a policy that would multiply the number of employees and lessen the number of unbiased votes."

Mr. Roberts' solicitous care of the thousands of employees under him never relaxed, and everything was done to add to their personal advancement and contentment. In this direction and in consonance with his religious depths, he extended the utmost encouragement to the formation, development and maintenance of the

Railroad Departments of the Young Men's Christian Association. He believed that such Departments had the tendency of bringing all classes of railroad men into closer touch one with another; of establishing a reciprocal bond between officer and employee, and of reducing discontent to the minimum. In writing to an officer of the Adams Express Company, he said, speaking as an officer of the Pennsylvania Railroad Company: "This Company has taken a great interest in assisting these organizations, feeling that all we do in this direction is more than returned in the moral and improved and intellectual condition of such of our employees as are brought under their influence." He took great personal interest in establishing and housing the Department in West Philadelphia. He laid the corner-stone of the building at Forty-first street and Westminster avenue, and said, after having done so:

"Fellow-railroad Employees: It is over forty years since I first began to lay corner-stones for the Pennsylvania Railroad, but I do not recall in any instance that I have had the pleasure of taking part in any that promises more prosperity to the Company and its employees than this, the corner-stone of the Pennsylvania Railroad Department of the Young Men's Christian Association."

He was present at the opening of the building, January 23, 1894, and being moved by the inspiration of the hour, addressed the employees present as follows: "When I received the invitation to attend the dedication of this beautiful building I exacted from your Chairman the promise that I should not be called on to make a speech, but when I see so many here who are my co-laborers in our great corporation I could not resist saying a few words. It seems only a few weeks ago that we met to lay the corner-stone of this building. What we all then hoped for has been more than realized, and the rest is in your hands. You can make what seems good to you of the opportunities now offered you, and in utilizing and making them of value you will have, I can assure you, the hearty co-operation of the officers and Directors of the Company. Whenever men are needed for positions of responsibility, the eyes of the officers are turned towards institutions such as this, and not

to men who spend their evenings in saloons or other places that unfit them for their work. No methods for the moral and intellectual improvement of employees of the Company have been more productive of good results than the institutions of the kind which have been established along the line of the railroad. The gentlemanly, faithful, efficient service of the employees is the best evidence of this, and particularly along the line of the Pennsylvania Railroad. It is only those who have a high sense of responsibility such as an earnest member of an association as this must have, who can be trusted when off duty as well as on duty. On behalf of the shareholders of the Pennsylvania Railroad Company, I desire to express my hearty appreciation of the work that has been done, and to assure you of their best wishes for the future. The shareholders heartily recognize that to the fidelity and conscientious performance of duty by the employees is largely due the success of their road."

Instances could be multiplied where the paternal feeling was displayed. Mr. Roberts was ever ready to aid substantially any movement looking to the bettering of the condition of the Company's employees, if any evidence was displayed by them that they would help themselves. His kindness to and consideration for others were some of the striking traits in his character.

Notwithstanding he had a natural antipathy to publicity, he was nevertheless a man of great public spirit, and foremost in nearly every movement looking to the benefit of Philadelphia and the country. He was one of the Directors of the Free Library, in which he was much interested; Vice President of the Fairmount Park Art Association, a member of the Pennsylvania Historical Society, of the Sons of the American Revolution, of the Lawyers' Club of New York, of the Church Club, the Art Club, and Farmers' Club. He was held in high esteem by the officials of all the other trunk line railroads, and as a tribute of their respect he was appointed Chairman of the Board of Presidents of the Trunk Line Association, and many times re-elected to that position. He was regarded with some awe in railroad councils, and when he set out to right a wrong he rarely failed to accomplish his purpose.

A special meeting of the Board of Directors of the Pennsylvania

Railroad Company was held in the Board Room on Monday afternoon, February 1, 1897, for the purpose of taking action upon the loss it had sustained. Official announcement of the death was feelingly made by the Chairman, and the following minute was made and ordered to be entered upon the records of the Company :

“The protracted illness through which Mr. Roberts had passed, and which had deprived the Company of his services since August last, had to a certain extent prepared the minds of his colleagues for the announcement of this sorrowful event, but underlying the fear felt by all had been the hope that, even if he were not restored to full vigor and usefulness, he would be spared for some years to come to give his counsel for the benefit of the property with which he had been so closely connected for nearly half a century.

“Entering the service as a rodman in 1851, he had filled successively positions of increasing trust and responsibility, had been for seventeen years its President, and had at his command a store of knowledge and experience which he devoted to the interests of the Company, and which made him not only a leader in the railway world, but the peer of the ablest in the activities of business life.

“Born in 1833, and adopting the profession of an Engineer, he saw in 1852 the completion of the work that gave Philadelphia a through line to the West, and after varied and useful service with roads, many of which are now embraced in the Pennsylvania Railroad system, became Assistant to the President in 1862. While specially in charge of engineering and construction, he became thoroughly conversant with the policy of the Company, and added to his professional attainments a comprehensive knowledge of financial questions, which served all the better to equip him for the position that he filled with such signal success from his election to the Presidency in 1880 until the time of his death.

“Upon assuming the duties of Chief Executive of the Company it became a pleasure to him to deal with the important problems connected with the growth and development of traffic. His great ability was nowhere more clearly shown than in the mastery of these questions, and his election as President of the Trunk Line Association made his counsel invaluable in reaching a solution of the

grave problems growing out of the incessant competition between rival railway interests.

"Mr. Roberts' sense of justice was so keen that no one ever feared to leave to his decision the determination of what was right; and he carried this high rectitude into all the details of life. He not only gave his best faculties to the conservation and promotion of the interests of the Company, but he gave the same conscientious service to public affairs, to the Church, and to the various institutions with which he was connected. He felt that each man owed a duty to the community, and that it was only by its proper discharge that the prosperity of the country, the State and the city could be permanently secured.

"It has indeed been fortunate for the Company that in the period covered by his term of office as President many of the vital questions bound up with its welfare have had to be largely solved. The great system which had its foundations laid by Mr. J. Edgar Thomson, and which had been broadened and strengthened under the active and enterprising administration of Mr. Thomas A. Scott, then needed most of all the strong and conservative policy which marked Mr. Roberts' career to round up and make symmetrical the work of his predecessors.

"Through his labors many perplexing problems incident to its rapid growth have been disposed of, and the management fortunately left free to meet the new difficulties growing out of the unrestricted competition between the transportation lines and the unsettled condition of our commercial and political affairs.

"Careful in reaching a conclusion, and only determining upon a course to be pursued after exhaustive investigation, no one could act more promptly or vigorously when the proper time arrived; and the members of the Board do not need to have recalled to them the many instances where great responsibilities were suddenly assumed by him, and where the outcome of his action was invaluable to the Company's interests.

"His official relations with those in the service were marked by the kindest consideration, and no one could be more patient in listening, even when the views expressed might be directly antagonistic to his own. His intercourse with the public in the many

business and social phases of life was marked by the same modest bearing and conscientious discharge of obligation that marked his career as the President of the Company; and in the home life, to which he was devoted, he found that rest and relaxation which lightened the labors of his busy career.

"In recording the death of him who was not only the able, conscientious and devoted President of a great railway system, but the warm personal friend of those who were associated with him in its management, it is only necessary to point to the work which he has done as his enduring monument, and to add the tribute of that affectionate regard which it was impossible not to feel for him, and which best testifies to the close and harmonious relations which existed between him and those who had the privilege of serving under him in the administration of the Company's affairs."

Mr. Roberts combined within himself those pronounced qualities of his predecessors such as made Merrick pre-eminent as a promoter, Patterson as a business man, Thomson as an engineer, constructor and organizer, and Scott as a manager and developer. Added to these, his abilities as an administrative officer and his genius as a financier placed him in the front rank of the world's great men, a position he occupied and maintained with an exceptional modesty. The underlying principle of the policy by which he conducted the Pennsylvania Railroad Company's business was that the business of a corporation should be carried on by those methods which have been most successful in the lives of individuals; that there should be integrity in all things; economy, not parsimony, in expenditures; provision for the future in prosperous times; ownership of what it is wise to control, and keeping up with the general progress of the times.

Pursuing his policy on that basis, the financial standing and credit of the Company rose as high as that of the United States Government, and kept itself there during the period of the greatest depression in business ever known in the United States.

As he left the impress of his character upon business life, so he did upon that of the Church. He was an earnest, devout Episco-

palian, faithful in the full performance of all duties imposed upon him by his membership in that communion, whether as a simple worshipper ; a member of the vestry of St. Stephen's, Philadelphia ; Rector's Church Warden of St. Asaph's, Bala ; or a lay deputy to the convention of the Diocese of Pennsylvania. In all those relations to the Church his quiet but effective performance of duty was always impressively reverential. He was a liberal giver to charitable objects, as well as to others of a public nature, and in every phase of his life walked upright as a Christian.

The obsequies took place on Tuesday afternoon, February 2d, from his late residence, where, in addition to the family and relatives, were assembled those close friends in business circles who were to act as his honorary pall bearers. Before the last departure from the old home, around which clustered so many loving attachments, the Rev. Frederick Burgess, the former rector of the parish, recited a short and impressive service. Then the body, followed by those present, was borne to St. Asaph's Church, a short distance away. In the meantime the beautiful sanctuary was rapidly filling up.

From the councils of the city, State and nation ; the centres of trade, transportation, commerce and finance ; the Church, the home, the office, the shop, the train service, the tracks—through all the varied grades and conditions of life—from the Governor of the Commonwealth to the track-walker of the Schuylkill Valley Railroad, both of whom were present, came true and sincere mourners to pay the last sad tribute of respect to one they had loved and looked up to as a leader along the better pathways of life. The church, built largely through his beneficence, was still beautified by the Christmas greens which decked chancel and nave. On the sacred altar a few modest lilies of spotless whiteness appeared like presiding deities. A hush came over the audience—the solemn tolling of the bell mingling with the wild moanings of the north-west wind without, and the sad pealings of the organ within, seemed to find responsive throbs in the breasts of all present as the sorrowful cortège entered the sacred portals. It was a solemn and impressive moment as the muffled tread of the vested choir was followed by the soft but stately footfalls of the Bishop and Clergy,

accompanied by the full, clear and sympathetic tones of Rev. Dr. S. D. McConnell saying, "I am the resurrection and the life, saith the Lord, he that believeth in me, though he were dead, yet shall he live ; and whosoever liveth and believeth in me shall never die." Following came the seven faithful men who loved to serve him in life bearing gently, tenderly and carefully, the casket containing the mortal remains. As the casket was deposited on the bier in front of the chancel the choir chanted, in softened tones, selections from the 39th and 90th psalms. The Rev. Mr. Olmstead then read the lesson taken out of the fifteenth chapter of the First Epistle of St. Paul to the Corinthians, and the choir sang :

" Abide with me ; fast falls the eventide ;
The darkness deepens ; Lord with me abide ;
When other helpers fail, and comforts flee,
Help of the helpless, oh, abide with me.

" Swift to its close ebbs out life's little day ;
Earth's joys grow dim, its glories pass away,
Change and decay in all around I see ;
Oh, Thou who changest not, abide with me.

" I need Thy presence every passing hour ;
What but Thy grace can foil the tempter's power ?
Who, like Thyself, my guide and stay can be ?
Through cloud and sunshine, Lord, abide with me.

" I fear no foe, with Thee at hand to bless !
Ills have no weight and tears no bitterness.
Where is death's sting ? Where, grave, thy victory ?
I triumph still, if Thou abide with me.

" Hold Thou Thy cross before my closing eyes ;
Shine through the gloom and point me to the skies ;
Heaven's morning breaks, and earth's vain shadows flee ;
In life, in death, O Lord, abide with me."

The Creed was said by the Rev. Mr. Burgess, followed by the Clergy and people, the rich, full tones of the many men present adding dignity and force to its language ; appropriate prayers were said, the 394th hymn, " O ! Paradise," sung by the choir, and the Benediction pronounced by the Rt. Rev. O. W. Whitaker. Solemnly the line again formed, and to the strains of the recessional "The Strife is O'er " the remains were borne from the sanctuary to the tomb at East Laurel Hill Cemetery.



WILLIAM B. FOSTER, JR.,

In the privacy of his domestic life his gentleness and amiability found its highest expression. He entered with great enjoyment into all the home pleasures, making companions of his children, sympathizing with them in all their studies, occupations, joys and sorrows, and making friends of their friends.

Such is the record of a man, an official, a citizen, a husband, parent, friend, who lived too briefly a life full of wisdom, power and love along the simple lines of truth. A great and good man, whose greatness and goodness were but the logical outcroppings from a well-tilled Christian soil. His life was of that exalted character that its influence for good will outlive the tomb and bear fruit in the better lives and works of those who had the advantage of personal contact with him.

WILLIAM B. FOSTER, JR.

In that triumvirate composed of John Edgar Thomson, William B. Foster, Jr., and Edward Miller, which governed the engineering and established the rules of business and business discipline that brought success to the Pennsylvania Railroad Company, William B. Foster, Jr., was a strong figure. Eminent as an Engineer—of great intelligence, unquestioned integrity, thorough and reliable in details and tenacious of their observance—he became an administrative officer of high rank. A man of honor, with retiring manners, firm in the right, the foe of wrong in any guise, of excellent heart, his nature adorned by amiability and gentleness, he won early in life the love and admiration of the people of the Commonwealth, and was widely mourned when the tomb claimed him. He was a perfect cyclopædia of knowledge of all matters pertaining to his profession, the public works and the progress of the State, and there was no better and more favorably known man within its borders.

Mr. Foster was born in Lawrenceville, Pittsburgh, in 1808. His father, William Barclay Foster, a Virginian by birth, moved to that city from near Canonsburg, Washington County, in 1796, to enter into partnership with Major Ebenezer Denny. By industry, probity and affability the elder Foster acquired a widespread popularity, which led to the accumulation of a fortune. During the second war with Great Britain, Mr. Foster, who was a man of unbounded

patriotism and remarkable public spirit, was appointed Deputy Commissary of Purchases. The Government supplied him with its bonds to purchase arms, ammunition and clothing to fit out an expedition to reinforce General Jackson at New Orleans. The credit of the Government was so low at the time that Mr. Foster, being unable to negotiate the bonds, applied \$90,000 of his private means and his personal credit to the fitting out the steamer "Enterprise," the fourth steamer that ever ran upon Western waters. The steamer arrived in New Orleans three days before General Jackson's victory over Pakenham, and the assistance it carried contributed to that celebrated event, General Jackson assuring Major Foster that without that timely aid he would not have been in condition to meet the enemy.

Mr. Foster laid out and named in honor of Captain James Lawrence, of the "Chesapeake," the town of Lawrenceville, a suburb of Pittsburgh, and selected within its limits the site for the United States Arsenal. During the sessions of the Pennsylvania Legislature of 1824-25-26 and 27, Major Foster, as a member from Allegheny and Butler Counties, earnestly advocated the adoption of a system of internal improvements, and it was by his efforts and those of other progressive lawmakers that the main line of the Pennsylvania Canal was ordered to be commenced. He died July 27, 1855, in the seventy-sixth year of his age, and was buried in Allegheny Cemetery.

The younger Foster began his career at an early age, and attracted attention before he reached maturity. Connecting himself with the public improvements of Pennsylvania, he won promotion by his merit. On the 5th of April, 1826, Nathan S. Roberts, an experienced Engineer from off the New York Canal, was appointed by the Board of Canal Commissioners to proceed to Pittsburgh and locate a line of canal from thence to the Kiskiminetas. Mr. Roberts began his operations April 19th on the Monongahela, at the foot of Liberty street, in the City of Pittsburgh, and continued them a distance of seventeen miles up the east side of the Allegheny River, though the opposite side of the river was finally adopted as the location of the canal. Passing through the property of the elder Foster, Mr. Roberts and his corps were invited to dinner.

After dining and about to resume the survey, Mr. Roberts remarked that he was in need of more help, and pointing to William B. Foster, Jr., who was then past seventeen years of age, said to the father, "Suppose you let your son go with us, Mr. Foster, and learn to be an Engineer." The proposition was accepted, and the young man immediately entered the corps as axeman at a salary of one dollar per day. Promotion followed, and he was soon a rodman, and then a levelman. His quick action, judgment and high moral character advanced him in a short time to the position of Assistant Engineer. He remained with the work until it was completed. For a short time he served as a Deputy Sheriff of Allegheny County under William Caven. Returning to his profession, he was engaged for several years upon the Green River improvements in Kentucky. In 1833 he again entered the service of Pennsylvania as Engineer upon the North and West Branch Canals. In 1835 he was employed by the Pennsylvania and Ohio Canal Company and placed in charge of a division of their work, in which employment he continued until the spring of 1837, when, great inducements coming to him from Kentucky, he again repaired to that State. In the spring of 1839, his health being somewhat impaired by fevers, he returned to Pennsylvania. On March 7, 1839, he was appointed Principal Engineer on the North Branch Division of the canal, from the Lackawanna to the northern termination of the third division, and on March 20, 1839, entered upon the duties pertaining to the position. He pushed the work with great vigor until 1841, when it was suspended for want of an appropriation. In 1842 the work was resumed, and on the 8th of February that year he was again appointed Principal Engineer in charge of its construction and that of other unfinished lines in the State, and continued managing the work in that capacity until he took his seat in the Board of Canal Commissioners.

On the 18th of April, 1843, the Act of Assembly making the Board of Canal Commissioners an elective one became a law by lapse of time, Governor Porter having failed to take action upon it. Mr. Foster was one of the three Commissioners elected in October, 1843, under the Act, James Clarke and Jesse Miller being the two others. The law contemplated that at subsequent elections one

Commissioner should be chosen each year to serve a three years' term, and provided that those chosen at the first election should draw lots for one, two and three year terms. Mr. Foster drew the three year term in the presence of William Bigler, Speaker of the Senate, and James Ross Snowden, Speaker of the House of Representatives, who certified to the fact upon the Journal of the Board. The Board organized January 9, 1844, with James Clarke as President. The Board was not allowed under the law creating it to further employ a Chief Engineer, the duties of whom devolved upon the President. The pay of each member was three dollars a day. Mr. Foster became President of the Board on January 13, 1846, and continued as such until the expiration of his term, January 12, 1847. The Board to which Mr. Foster was elected was a reform Board, that upon its organization set to work to correct the great abuses which had crept into the management of the Public Works. Peculations were ferreted out and punished, expenses reduced and trade stimulated, so that the receipts increased, and under Mr. Foster's administration as President to such an extent over expenditures as to be, for the first time, equal to a considerable annual dividend upon the original cost of the Works. He had been nominated for a re-election at the State election in October, 1846, but was defeated by the Whig candidate, Mr. James M. Power, a very reputable man. Mr. James Clarke, who had been so long and favorably connected with the Public Works, said on that occasion: "I would rather, if I owned the Public Works, pay William B. Foster, Jr., thirty thousand dollars a year than lose his services as Canal Commissioner. The loss of him can never be repaired."

That year, 1846, was not a good one for a Democratic nominee in Pennsylvania, and the Whigs elected their State ticket and nearly every State Senator and Congressman. The tidal wave which brought about that result was chiefly caused by the repeal of the tariff of 1842 and the enactment of that of 1846. In addition to that fact, which militated against Mr. Foster's return, there was a corrupt element within the Democratic party interested in plundering the Public Works to whom his honesty and integrity were a constant menace. That element, unable to prevent his

nomination, very earnestly opposed his re-election and aided in his defeat. It was a high honor they unwittingly paid him—a great testimony to his faithfulness.

Mr. Foster early foresaw that to properly develop the Commonwealth by promoting the construction of Public Works, particularly railroads, the medium of such promoting would have to be private corporations, conducted upon business principles, and not the Commonwealth through its officials, who most likely would be dominated by party policy and personal necessity. In consequence, he was found as an earnest and warm advocate of creating a corporation to construct a railroad from Harrisburg to Pittsburgh. It has been truly said of him: "From the first he exerted himself in favor of its (Pennsylvania Railroad Company) charter, and from his long connection with the public improvements of Pennsylvania, his knowledge of her resources, and his extensive acquaintance with the people in all parts of the State, he was enabled to bring facts and influences to bear upon the Legislature such as largely contributed to secure the passage of the bill, strongly resisted as it was from certain quarters."

So conspicuously prominent had he been in procuring the charter that on the formation of the Board of Directors in 1847, and so pronounced were his abilities, it was conceded on all hands that to secure the success of the enterprise a person of his zeal and ability should be connected with the active operations of construction, and on April 9, 1847, he was unanimously selected as one of the two associates of Mr. Thomson, the Chief Engineer. He was placed in charge of the construction of the Eastern Division, and proceeding immediately to work, put in the field the first Engineer Corps in the interest of the Pennsylvania Railroad Company, and by the time Mr. Thomson reached the scene from Georgia Mr. Foster was actively engaged. In a biographical sketch written by his brother Morrison, and which appeared in "Appleton's Guide" for July, 1860, there appears this statement: "That portion of the road from Harrisburg to Lewistown, and thence to Huntingdon, was soon under contract, and the valley of the Juniata, whose echoes had for years been awakened only by the horn of the canal boatman or the oath of the driver, was now the busy scene of a new

excitement. Thousands of men were hard at work felling trees and sending them crashing into the valleys below, filling up chasms, leveling mountains, or boring through the middle of them. Upon this work Mr. Foster labored incessantly day and night, in the saddle and at the desk. He possessed a most excellent memory, and could remember events, dates and amounts with wonderful accuracy. His rapidity of execution was astonishing, and was mainly the result of this faculty. He was also endowed with great vitality of brain, and he worked untiringly, and trained every one about him to work hard. He could pass into his office in the dark and readily lay his hand upon almost any paper he wished to have, so systematic and methodical were all his arrangements."

On the 7th of July, 1847, ground was broken at Harrisburg and construction begun. In the fall of 1850, the engineering difficulties all being provided for and the road opened between Harrisburg and Hollidaysburg, he again entered the service of the State as Principal Engineer. Mr. J. Edgar Thomson in his report for 1850, dated January 1, 1851, says: "I cannot conclude this report without expressing my obligations to my late associate, William B. Foster, Jr., with whose co-operation the Eastern Division of the road, notwithstanding the numerous drawbacks encountered, has been placed in use at a cost below the estimate submitted to the Board. Mr. Foster has left the service of the Company for that of the Commonwealth, and is now actively engaged in completing the North Branch Canal."

He returned to the railroad service in 1852, and under the new organization which went into effect December 1, 1852, was appointed Auditor, with his principal office in Philadelphia. On May 20, 1853, he was elected by the Board, under the authority of the Act of March 23, 1853, a Director, to act as Vice President. The duties of the office, as defined by a resolution passed at the same meeting, were "to attend all meetings of the Board, when in the city, to preside during the absence of the President, and to attend to such portion of the duties of the President as that official might from time to time assign him or the Board hereafter direct." After the purchase of the Public Works the Company created the Canal Department, and on August 5, 1857, attached it to the Vice Presi-

dency in charge of Mr. Foster, who laid the foundation of its organization.

The tonnage tax injustice bearing so heavily on the Company's interests, the Board determined upon doing everything in its power to accomplish the repeal of that measure, and in pursuance of that determination on October 28, 1858, authorized Mr. Foster "to proceed to Harrisburg, and to remain there during the session of the Legislature, to represent and protect the interests of the Company with the advice and concurrence of the President." At the same time the Board appropriated \$500 to be employed at his discretion in publishing and disseminating the arguments favoring the repeal of the tonnage tax imposed upon the Company.

Mr. Foster's work at Harrisburg was purely defensive, and the campaign of education he pursued bore fruit in future years, when the object of his assignment to the Capital was accomplished.

In addition to being Vice President of the Pennsylvania Railroad Company, Mr. Foster was an Inspector of the Philadelphia County Prison under an appointment by the Supreme Court. He took his seat on that Board July 7, 1856. As a member of the Select Council from the Ninth Ward he served the City of Philadelphia during the years 1858 and 1859.

Mr. Foster died suddenly on Sunday, March 4, 1860, at his Philadelphia residence, a small hotel on Chestnut street below Thirteenth. He had been ailing for some weeks, and was confined to the house with a large carbuncle upon the back of his neck. The carbuncle had been allowed to close up and heal over before the pus had been thoroughly drained off. Mr. Foster was thought to be improving rapidly, and his physician held out the hope that in a few days his official duties could be resumed. On the night of his death he retired to bed and fell asleep at once. Toward midnight his stepson, Robert L. Burnett, whose bed was in the same room, was awakened by his very heavy and labored breathing. Proceeding to his bedside and finding him unconscious, or nearly so, the son dispatched a messenger for the doctor, but it was too late. In a few moments, with his head resting on the shoulder of the younger man, he gently sank to rest without a struggle. The pus from the carbuncle had accumulated rapidly, and not having

a drain to carry it off, burst the sac, and suffusing the brain, caused death. The announcement of his death created a most profound sensation throughout the Commonwealth, the people and press joining in their tribute of respect to his memory, and expressions of sympathy to his family. Nowhere was the mourning more sincere than among the officers and employees of the Pennsylvania Railroad Company, by whom he was greatly beloved. On Tuesday the services for the dead of the Protestant Episcopal Church were said over his remains at the residence of Mr. J. Edgar Thomson. The body was then conveyed from Philadelphia to Pittsburgh in a special funeral car fittingly draped, and accompanied by his brother-in-law, Rev. Edward Y. Buchanan, other relations, and Edmund Smith, Henry H. Houston, Herman J. Lombaert, W. F. Leech, Thomas A. Scott, General A. L. Roumfort, G. C. Franciscus and William Hasell Wilson of the Pennsylvania Railroad Company. Along the road flags were displayed at half mast, stations were draped in mourning, and employees and citizens gathered, and with uncovered heads did honor to his memory as the train moved slowly by them. The train arrived at Pittsburgh on Wednesday afternoon at one o'clock. The remains were received by the honorary pall bearers, General Henry D. Foster, of Greensburg, Governor Samuel W. Black, of Nebraska, R. Biddle Roberts, United States District Attorney, and Dr. Jonas R. McClintock. They were then conveyed to the grave prepared for them in Allegheny Cemetery, accompanied by every manifestation of public sorrow and private grief. From the great mass of eulogistic notices which appeared in the newspapers of the time the following is culled as the reflex of the sentiment of them all :

"The Pennsylvanian," published in Philadelphia, said editorially : "General Foster enjoyed in an eminent degree the confidence and warm regard of his fellow-citizens. His energy and intelligent foresight contributed largely to the undertaking and early completion of the Pennsylvania Railroad, and as an executive officer of the Company his sagacity and experience as a railway manager are universally acknowledged. As a member of Councils he evidenced an enlightened public spirit and an entire devotion to the best interests of the city. Utterly ignoring self, and seeking only the

right, few men have exercised a wider or more beneficent influence."

The Board of Directors ordered the following minute to be made in its records :

"WHEREAS, The Board of Directors of the Pennsylvania Railroad Company have heard of the sudden and unexpected demise of their late colleague, William B. Foster, Jr., Vice President, with profound sorrow. The long and intimate relations existing between Mr. Foster and many members of the Board ripened into that personal friendship and esteem which will render his memory dear to them and perpetuate their recollection of his many virtues. As an officer he was courteous but exact in the performance of his duty. As a member of the Board his views were just, his counsel always highly esteemed, and his manner of enforcing opinions conciliatory.

"*Resolved*, That in the death of William B. Foster, Jr., this Company has met with a loss difficult to replace, and the members of the Board a colleague for whom they had unbounded confidence and the highest esteem.

"*Resolved*, That the Board deeply sympathize with the bereaved orphan children and relatives in their sad loss, and that the Secretary be instructed to furnish them with a copy of these resolutions.

"*Resolved*, That the Board will attend the funeral service on Tuesday, the sixth instant, and that the President be requested to close the office on that day as a mark of respect to the memory of the late Vice President of the Company."

Mr. Foster, as a public official and a railroad man, was loved, honored and respected for his sterling character by those who came in contact with him ; and in the home circle, where his beautiful nature shone to the best advantage, the affection for him was unbounded.

His brother, the Hon. Morrison Foster, of Allegheny County, in his work, "Biography, Songs and Musical Compositions of Stephen C. Foster," has this to say : "Stephen was very fond of his oldest brother, William, whose business as Chief Engineer of the Public Works (canals and railroads) of the State of Pennsylvania

kept him from home a great deal. William had a big, affectionate heart, and his little brother had many reasons for gratitude towards him for kind remembrances in the way of frequent presents and other tokens of affection. When he was about thirteen years old, William proposed to take him to Towanda, in Bradford County, where his headquarters were established at that time, and, there being a good school near by (the Academy at Athens), he stated that Stephen might go to school if he wished. With the assent of our parents the offer was accepted. It was winter, and William drove all the way to Towanda in his own sleigh, drawn by two horses. The distance traveled was over three hundred miles, but the sleighing was good, and of course it was a jolly journey for the little boy, especially as brother William was a man of great personal popularity, and had many friends and acquaintances everywhere along the road. Ten years after that time brother William, John Edgar Thomson and Edward Miller were the Engineers who built the great Pennsylvania Railroad. At the time of his death William was the Vice President of the Company and Mr. Thomson the President. Here grateful memory requires a tribute of affection to good brother William. With a heart as 'tender and true' as the Douglas, and as brave, he was a dutiful, loving son, and a generous, affectionate brother. He was a Christian, firm in his devotion to his Redeemer, and his life's pathway was blazed with the marks of his goodness. Always devoted to duty, he put on the harness of usefulness and industry at the age of sixteen years and wore it continuously to the day of his death. He was honored in many ways by the people of his native State, and now the last survivor of his family is proud to write of him; he was an honor to his State and to his friends."

And now the compiler of this sketch, his last surviving appointee in the service of the Pennsylvania Railroad Company, the beneficiary of many of his thoughtful acts of kindness, who loved him in life and treasures his memory with affectionate regard, would drop a tear at his tomb whilst recalling the many virtues which made him an exceptional citizen of Pennsylvania.

" Too kind for bitter words to grieve,
Too firm for clamor to dismay,"



G. C. FRANCISCUS

He reached the prime of life loving and beloved, only to pass from time to eternity—leaving a Commonwealth to mourn his loss.

GEORGE C. FRANCISCUS.

George C. Franciscus was born in the City of Lancaster, Pennsylvania, on the 27th of December, 1821. He had a very limited advantage of the schools, and when but a mere boy obtained employment in a book store in his native city. Whilst in that employment he embraced the opportunity afforded to read and study books, which he did to his great credit. When but sixteen years of age he left Lancaster and accepted employment as a clerk in the transportation office of Brown & Reed, situated on the Columbia Canal Basin. He remained with the firm until in the early forties it went out of business, when he entered the office of E. J. Sneider, who was the agent at Columbia for Leech's Transportation Line. In 1849 he went to Baltimore as representative of Leech's Line, and remained there until January 1, 1853, when Mr. J. Edgar Thomson selected him as freight agent of the Pennsylvania Railroad Company at Pittsburgh. To him is due the credit of bringing order out of the chaos into which the freighting business of the Pennsylvania Railroad, both in its local and interchange aspects, had fallen at Pittsburgh. He resigned as freight agent at Pittsburgh, January 7, 1857, and until August of that year was engaged in an advisory capacity with the President. On the 1st of August, 1857, he was appointed Superintendent of the Philadelphia and Columbia Road under the name of the Philadelphia Division, his jurisdiction extending from Philadelphia to Dillerville and Columbia, and his splendid organizing and administrative abilities soon produced a revolution on the road, and brought it within and under the control of business methods. His jurisdiction was extended to Harrisburg on January 1, 1863.

The rapid growth of the City of Philadelphia, whose business interests were interwoven with those of the Pennsylvania Railroad Company, presented so many special questions for determination by a well-equipped transportation official that the necessity for the office of General Agent arose. With that necessity came the creation of the office, and the selection of Mr. Franciscus as its first in-

cumbent. He continued as General Agent until his death, which occurred at Cresson Springs, July 23, 1870.

Mr. Franciscus was a man of strength and breadth, positive in manner, inflexible in requiring obedience, yet withal kind and considerate to those who came under his official leadership. His judgment in the line of his business was unerring, and his counsel constantly sought by the management of the Company. A most efficient officer, a good citizen and kind friend, his death was deeply regretted.

THOMAS T. FIRTH.

Among the names of the earlier officers of the Pennsylvania Railroad Company, there is none to which a halo of loving remembrance clings with greater tenacity than that of Thomas Thompson Firth, the second Secretary of the Company.

Mr. Firth was born in Salem, N. J., November 20, 1805, and was descended from John Firth, who came from London to America in 1705 and settled in Salem. The grandson of this John Firth married Elizabeth Carpenter, the granddaughter of Samuel Carpenter, who had married a daughter of Governor Thomas Lloyd.

Thomas T. Firth received his education in the schools of his native town. Upon graduating in early life he came to Philadelphia and took a clerkship in the house of Jones, Oakford & Co., then engaged in the East India and China trade, Mr. Jones being his uncle. Later he engaged in the book business, and was afterwards an employee of the United States Bank at the time its operations ended. On August 9, 1848, he was elected Secretary of the Pennsylvania Railroad Company, and served in that capacity until January 15, 1855, when he was elected Treasurer, to succeed George V. Bacon, deceased. He was obliged, on account of ill-health, to resign his position as Treasurer March 1, 1873, but continued his connection with the Company until April 1, 1881, when he retired from all active work. On his resignation of the position of Treasurer, he was made Secretary and Treasurer of the Sinking Fund and the Consolidated Mortgage, and Treasurer of the Insurance Fund, thus continuing him in an honorary connection with the Company he had served so many years. He died at his residence in Germantown, Philadelphia, July 22, 1881.



THOMAS T. FIRTH

He was at one time quite actively engaged in military affairs, holding a commission in the Pennsylvania State Militia as Brigade Inspector, under date of November 7, 1842, and as Lieutenant Colonel, January 27, 1849. He served on the staff of Major General George Cadwallader during the riots of 1844, and was commissioned as Acting Brigade Inspector by special request of Major General Cadwallader, with the title of Major, in 1861, serving without pay. By reason of this fact he was always known among his friends and in the office as "Major Firth."

He was a man of strict integrity, punctual in his habits, and, having been brought up in his youth in a commercial house, was well versed in business methods and finances. The interests of the Pennsylvania Railroad Company were always his first thought in any transaction, and no personal considerations moved him. He was a hater of sham and despised deceit in any form, warm-hearted and generous, charitable, and sympathizing with any one in distress. With his friends he was a genial and pleasant companion, fond of a good story and appreciating a good joke. If at times his manner was rather brusque, those with whom he came in contact soon understood and respected him, and his kindness of heart and generous disposition endeared him to his many friends. Those loved him best who knew him best. He expected of his clerks a strict attention to their duties, though the kindness of his heart frequently led him to overlook their failings. He was a steadfast friend to "his boys," as he called the clerks, gave them fatherly advice, and always looked after their interests and advancement in position. He discouraged flattery, but exacted a proper respect from all.

During the war he was a thorough "Union man," and had no patience with those Northerners who sympathized with the South. In 1862, at the time the army of General Lee invaded Maryland and the battle of Antietam was fought, he required all the clerks and employees of his Department to stand in a circle and take an oath to support the Government of the United States.

The interest he took in the welfare of the clerks under his immediate charge was extended to employees in every department of the Company's service, and when the sad intelligence of his

death was conveyed over the wires it was received with deep regret throughout the system.

W. MILNOR ROBERTS.

To the list of the names of those who have done so much for the Cumberland Valley by building up its line of railroad must be added that of W. Milnor Roberts, the Chief Engineer who constructed that important improvement. Mr. Roberts was one of that distinguished class of men of which John Edgar Thomson and William B. Foster, Jr., were types, who materially aided in the development of the science of civil engineering, particularly in its relation to railroad construction and maintenance. He was of Welsh descent, the emigrant ancestor coming to America with William Penn. He was born in Philadelphia February 12, 1810. After being educated in a Quaker school, a two years' term in a special course of mathematics under Professor Roberts, and a course in architectural drawing under the tuition of John Haviland in the first school established by the Franklin Institute, Mr. Roberts started, when fifteen years of age, upon his long and creditable career. His introduction to the profession which he adorned and pursued with wonderful activity, intelligence and devotion for a period of fifty-six years, was as a member of the corps of engineers engaged under the auspices of the Commonwealth of Pennsylvania in the construction of the Union Canal. At that time there was no railroad in operation, although the agitation for railroad construction was going on. The devotion to his work and the energy he displayed in its execution attracted the attention of his superiors, Canvass White and Sylvester Welch, who, appreciating his abilities, advanced him correspondingly. In 1826 he went as rodman with Mr. White in a survey across the Allegheny Mountains, with reference to locating a macadam road as a portage to connect the waterways east and west of the mountains. In the following year he was sent upon the survey and construction of the Lehigh Canal, and whilst engaged in that work made his first acquaintance with a railroad in the incline planes at Mauch Chunk. He aided in the improvement of those planes. In 1831 he was taken from the service of the Lehigh River and Canal Improvement, appointed



W. MILNOR ROBERTS

Senior Assistant Engineer, and placed in charge of the location and construction of the Allegheny Portage Railroad on the eastern side of the mountain. Eight of the planes, five on the eastern and three on the western side of the mountain, were constructed under his supervision. His time from thence on until January, 1835, when he resigned to accept the Chief Engineership of the Harrisburg, Portsmouth, Mt. Joy and Lancaster Railroad, was devoted to the Allegheny Portage Railroad and the western division of the Pennsylvania Canal. He was only twenty-five years old when he was selected to be the Chief Engineer of the important railroad between Harrisburg and Lancaster, whose location and construction presented new problems which he had to solve without precedents to guide him; but being a close observer of physical facts, and having a retentive memory, a special aptitude for design, a quick appreciation of the essential, great mechanical ability, untiring energy and devotion to his work, the solution was speedily forthcoming, and the correctness of his conclusions is to be found in the fact that after sixty years the location remains practically unchanged.

Whilst engaged on that work he was elected Chief Engineer of the Cumberland Valley Railroad Company, and finished the construction of both lines, and this before he had reached the thirtieth year of his age. His career from thence until his death was one continued success in rail, canal and bridge construction, and some of the most prominent works in North and South America bear testimony to his great abilities. The State canals of Pennsylvania, the Welland of Canada, the Erie of Pennsylvania, the Sandy and Beaver of Ohio—all came within his employment, either as Chief or Consulting Engineer, as did also the Bellefontaine and Indiana, the Allegheny Valley, the Atlantic and Pacific, the New Allegheny Portage, the Pittsburgh and Erie, the Terre Haute, Vandalia and St. Louis, the Northern Pacific, and many other American railroads. He was the practical engineer of the St. Louis Bridge. Captain Eads being absent in Europe during the two years of engineering, the planning of that notable structure fell upon Mr. Roberts. The railway systems of Nova Scotia and Brazil were largely promoted by his engineering skill and aptitude for constructing vast works of public

improvement. The Government of the United States in the improvements of rivers and harbors called him to its service, and he acted on the commission to examine and report upon the proper method of improving the mouths of the Mississippi, as also a member of the advising committee on the construction of the South Pass jetties at the mouth of that river. He was on the commission which recommended the Des Moines Improvement of the Mississippi River at Keokuk, Iowa. The United States Government also placed under him, as Civil Engineer in charge, the improvement of the navigation of the Ohio River. Prominent cities, notably Philadelphia and Pittsburgh, consulted him as to their water supply. This skeleton sketch, with many omissions of the work he was called upon to perform, is given to illustrate how valuable he was to his times, what vast extent of country his talents covered, and his versatility. In 1879 he returned to Brazil, the scene of some of his earlier triumphs, and made a three years' contract with the Government of that country to act as an Engineer of any of its public works. He made examinations and reports on its ports and rivers and the water supply of Rio de Janeiro. On the 2d of July, 1881, he started to make an examination of the Rio das Velhas, but being attacked with typhoid fever, he suspended his journey on the 7th at a settlement called Soledade, and died at that place, July 14, 1881, in the seventy-second year of his age. Among the many positions of honor he was called upon to fill was the Presidency of the American Society of Civil Engineers, and Chairman of the Finance Committee of the Centennial Commission of the Society. In "Transactions" of the Society appears this summary of his career:

"His professional life began with the beginnings of American engineering. He took part in the earliest canal construction, and in those improvements of river navigation which preceded the railway. In the fullness of his experience he aided in the most important development of the treatment of great rivers the world has ever known. He was of those brave pioneers who built the first railroads in our country, and before the end of his life he was the Chief Engineer for a great transcontinental line. With all his achievements and experiences he was always unassuming, genial, courteous, a true and kindly gentleman, pure and modest."



GEORGE WINCHESTER

GEORGE WINCHESTER.

George Winchester, the pioneer president in the system of roads since consolidated into the Northern Central Railway, was born in 1787 at Westminster, Maryland. That place had been founded by his father, William Winchester, who gave it his family name, but its location being so close to Winchester, Virginia, with which it was frequently confounded, he changed the name to its present one in honor of his birthplace in England. William Winchester was an extensive landholder of Maryland. Among his properties was a large country place which he named Bolton. This property was located in what is now North Baltimore. The territory still holds the name, although it is divided up among streets, residences and railroad property. Bolton Freight Station of the Northern Central Railway is on a part of the property, and remains a monument to the name of the magnificent home of the Colonial gentleman.

George Winchester received a legal education, and immediately rose to prominence in his profession. He removed to Baltimore, where he enjoyed a lucrative practice, and took an active interest in advancing the progress of the city, then struggling for commercial supremacy. His time, ability and means were given unstintingly to any project which promised to advance the city's best interests. In 1816 he was appointed one of a commission composed of the most prominent citizens to lay out, on territory recently annexed to Baltimore, city streets, lanes and other roadways. In 1823, in connection with Judge Bland and Mr. Robert Patterson, he was appointed on a commission to survey the route of the Susquehanna Canal, a charter for the construction of which had been granted by the Maryland Legislature. In 1825 Mr. Winchester contracted for the building of a steamboat at York Haven for the purpose of navigating the Susquehanna River above Conewago Falls in the interests of Baltimore trade. The boat was completed in the spring of 1826, and named the "Susquehanna and Baltimore." It made several experimental trips in March to Northumberland and Danville on the north branch and Milton on the west branch of the river. May 3, 1826, in descending the river, the boiler exploded at Nescopeck Falls, killing and injuring a num-

ber of people. This trial, with its tragic result, demonstrated to the mind of Mr. Winchester the impracticability of steamboat navigation of the Susquehanna, and he turned his attention to railroad development. He early became impressed with the value and importance of a rail connection between Baltimore and the Susquehanna, and urged his views on the subject with great clearness of expression. On the 26th of May, 1827, in connection with General Swift, he left Baltimore and made a reconnoissance to the Susquehanna to ascertain the best route for a railroad. The one he then selected is the one now occupied by the Northern Central Railway. He, however, met with considerable opposition in Pennsylvania when he visited the Legislature at Harrisburg in the winter of 1828-29 for the purpose of obtaining a charter to extend the Baltimore and Susquehanna Road to York, in Pennsylvania. The project was vigorously opposed by the Philadelphia members on the ground that it was intended to draw the trade of the Susquehanna from Philadelphia to Baltimore, and notwithstanding the favorable impression made on the Legislature by Mr. Winchester, it was not until March 14, 1832, that he was enabled to acquire the desired legislation. The construction of the Baltimore and Susquehanna Railroad, of which he was the most prominent projector and zealous supporter, was mainly due to him. His official papers as President of the Company stamp him as one of the most clear-headed and progressive railroad men of his time. An able lawyer, a fine speaker, a progressive citizen, Mr. Winchester occupied a high position in the community. In person he was commanding. He died in Baltimore in November, 1840, in the very prime of life, and in the midst of a very busy and honorable career. The only portrait of him extant is one made at twenty-six years of age. It is the property of his grandson, Mr. Marshall Winchester, of Baltimore, through whose great courtesy it is reproduced in these pages.

Mr. Winchester was the first president of any actually constructed railroad of any of the various companies now embraced in the Pennsylvania Railroad system, and is entitled to have his name written very prominently in the archives of American railroads.



ODEN BOWIE

ODEN BOWIE.

Oden Bowie, President of the Baltimore and Potomac Railroad Company, was born at Fairview, Prince George County, Md., November 10, 1826. He was the son of Colonel William Duckett Bowie and his wife, Eliza Oden. He came of a long line of illustrious ancestors whose names appear on the rolls of honor both in peace and in war during every epoch of Maryland's history since early colonial times. His emigrant ancestor was born in Scotland, near Stirling, during the seventeenth century, and settled near Nottingham, Prince George County, Md. The names of his great-great-grandfather, as well as his great-grandfather, appear on the celebrated declaration of the Maryland "Freemen," 1775. His great-uncle, Robert Bowie, was the first Democratic Governor of Maryland, and was four times elected, and men of his name and family have filled nearly every office in the gift of their State.

Oden Bowie was educated at St. John's College, Annapolis, and St. Mary's College, Baltimore. In 1846 he enlisted in Colonel Watson's battalion and embarked for Mexico. On account of conspicuous bravery at Monterey he was publicly complimented by General Taylor, and later promoted to a Captaincy by President Polk. He was at the time the youngest captain in the army. In 1849 he was elected to the House of Delegates, and later to State Senate; made Chairman of the Democratic State Committee; defeated for State Senate and also for Lieutenant Governor, the polls being each time in possession of Federal troops. In 1867 was elected Governor of Maryland by over 41,000 majority, which was the greatest plurality ever given to a candidate for any office in that State. In addition to being elected President of the Baltimore and Potomac Railroad Company, which office he held for over forty years, was elected President of the City Passenger Railway Company's lines in the City of Baltimore, and held this position for twenty-one years, being President of both companies at the time of his death. Was an ardent lover of the turf, and had many noted "flyers," such as "Crickmore," "Catesby," "Ore Knob," etc. Was President of the Maryland Jockey Club, which he organized. Was a regular attendant of the Episcopal Church, and

died December 4, 1894, and is buried in his family graveyard at his beautiful home, "Fairview."

In private life Oden Bowie was no less distinguished for his generosity and devotion to his family. It has been said that he assisted more young men to make a start in life than any other Marylander of this generation.

SAMUEL MORSE FELTON.

Mr. Samuel Morse Felton was the most prominent of the Presidents of the Philadelphia, Wilmington and Baltimore Railroad Company in their relation to the affairs of the Company, having brought the corporation up from the depths of almost financial ruin and placed it on a sound and paying basis.

Mr. Felton was born at West Newbury, Mass., on the 17th of July, 1809, of an old and influential family stock. Business depressions which followed the War of 1812 and the rascality of a partner ruined his father, who up to that time had been a very successful and prosperous wagon builder. In the winter of 1815 the family moved to Saugus, when Samuel went to a school taught by the Rev. Joseph Emerson, paying for his tuition by his labor. His education thus commenced was continued under the most trying circumstances, the battle with poverty being constant. However, by working on farms, sawing wood, serving as chore boy and clerk in a Boston grocery store, as a clerk and bookkeeper in a high school at Geneseo, N. Y., by teaching a private school at Lyons, studying all the while, he was able to enter Harvard in August, 1830. At that time his entire worldly possessions consisted of a cot bed, a few chairs, a table, a lamp, a quart of oil and ten dollars in money. Whilst in college he supported himself principally by teaching. Of his college career he wrote: "The struggles through which I passed for four years were many and various. Poverty, if it does not discourage, is not a bad companion for an ambitious young man; and though I would not choose it for the companion of one of my own children, yet I do not regret the homely and useful lessons I was taught in early youth by its constant contact."

Mr. Felton was graduated at Harvard in 1834 with high honors,



SAMUEL M. FELTON

delivering an English oration at commencement. In 1837, upon taking a master's degree, he was selected to deliver the Latin oration.

After having been graduated he removed to Charlestown, where he taught a private school and began to study law. Confinement soon made inroads upon his health ; he therefore laid down the latter and took up civil engineering, which soon so commanded his attention that he also gave up the school. From this time forward his career was upward and onward. In 1841 he made the first survey for the Fresh Pond Railroad, intended for the transportation of ice to Charlestown, and constructed it during that year. The next year he made a preliminary survey upon which the charter of the Fitchburg Road was obtained, and was occupied as Chief Engineer of that work for several years. Upon its completion in 1845 he became its Superintendent, and held the position until February, 1851, when he accepted the Presidency of the Philadelphia, Wilmington and Baltimore Railroad Company, which came to him unsought. The condition of the Company when he assumed charge of its affairs, the improvement in its physical and financial features under his administration, and details of his patriotic efforts during the war period, have already been given in these pages. The value of his services to the Company is told in the following minute passed by the Board :

" His administration was marked by the rapid growth of the road to a condition which placed it beside the best in the country for equipment and general prosperity ; for the success with which the peninsular system of lines was begun and prosecuted ; and for the wise forethought, vigilance and spirit with which he assumed the personal oversight and the ability with which he directed all the details of the road's management during the trying years of the Civil War, when he rendered services to the United States Government so memorable that they have become woven into our country's history. In 1865 impaired health, resulting from the unceasing strain of his labors of the few preceding years, compelled his retirement from the Presidency of the Company, but his subsequent years of service as a Director were so marked by his unabated interest in its affairs, his prudent counsel and his faithful execution of every

duty assigned him, as well as by great public services, that we account it a privilege to do honor in these few lines to the memory of Samuel Morse Felton."

Mr. Felton died January 24, 1889, honored and loved. His abilities, patriotism and gentleness won for him the respect, confidence and affection of all who knew him. He was thorough, conscientious and untiring. He felt the full responsibilities of life, and life's duties were real to him. In their performance he was always careful of the rights of others, and took great pains to see that those subordinate to him should have the full measure of credit for their part of the work. Kind and gentle, he attached the employees of the road to him by indissoluble bonds, and he passed over into the land of mystery sincerely mourned.

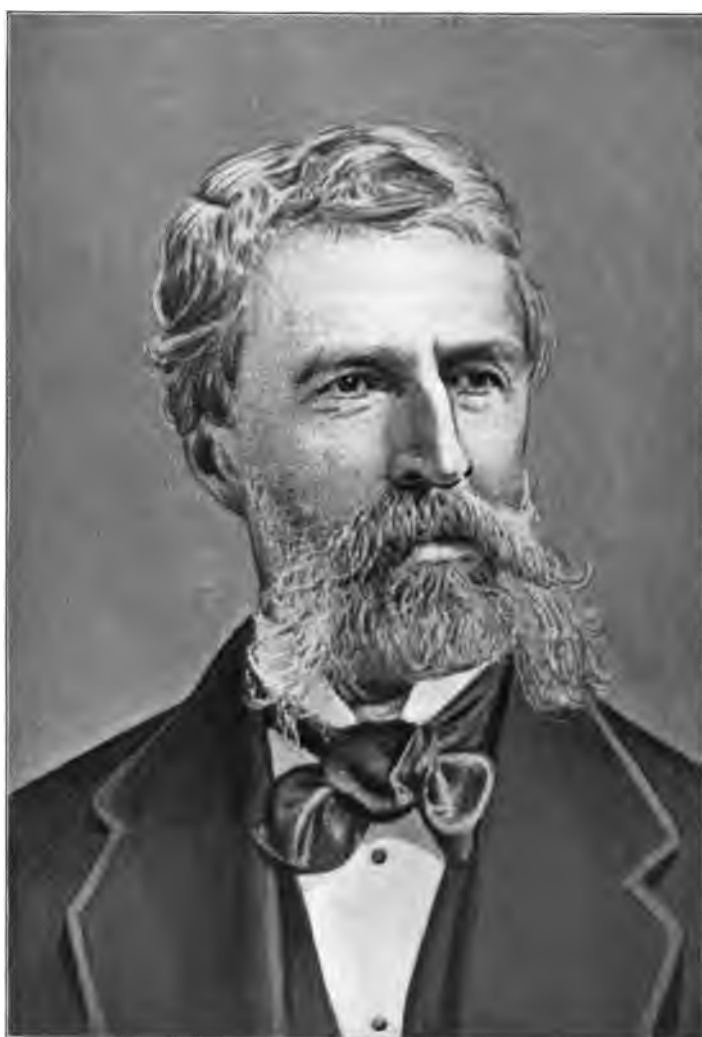
ISAAC HINKLEY.

Mr. Felton was succeeded in the Presidency by Isaac Hinkley, who died March 28, 1888. Upon that event the Board made the following minute:

"Mr. Hinkley's connection with this Company extended over a period of twenty-three years, he having succeeded S. M. Felton in the Presidency, and during this period, being one-third the allotted space of man's life, was devoted to its interests and the welfare of its employees with untiring zeal and energy. He was a scholar of marked ability; a wise and trusted counsellor, widely known, and respected as a man of highest integrity. His untiring industry, tact and skill in working out problems and settling important questions, not only relating to the interests of this Company but those pertaining to the railway interests of the whole country, were of great value; and in his relations with the officers and employees he was always kind, considerate and courteous. Important as were his services to this Company, their value was enhanced by the loyalty and disinterestedness with which they were rendered."

HERMAN J. LOMBAERT.

A notable figure in the construction and early developing periods of the Pennsylvania Railroad was that of Herman J. Lombaert. Of heroic mould, he was a man among men, commanding attention,



ISAAC HINCKLEY

admiration and respect, and whilst towards the close of his useful life a cloud passed over his intellect, yet throughout all its activities and responsibilities he loomed up morally and physically, a splendid specimen of a noble man. He was one of the most prominent railroad men of his times, and contributed largely to the development and maturing of the comprehensive system of management of the Pennsylvania Railroad.

Mr. Lombaert was born at Easton, Northampton County, Pa., October 30, 1816, and died in Philadelphia, Tuesday, March 10, 1885. After receiving his education in the schools of Philadelphia, he adopted civil engineering as his profession. He entered upon his public career under the supervision of Samuel H. Kneass, then engaged on the construction of the Philadelphia and Trenton Railroad. Upon the completion of that work, he accepted employment as Assistant Engineer in the location and construction of the Philadelphia, Wilmington and Baltimore Railroad. Recognized as being a man eminently practical in his ideas and of sound judgment, he was in 1844 employed by the government of Colombia, S. A., to survey and locate a route for a canal to connect the city of Carthagena with the river Magdalena. He returned to the United States in 1845, and engaged professionally in various public works in Pennsylvania and New England until the 12th of November, 1850, when he entered the service of the Pennsylvania Railroad at Harrisburg, Pa., as assistant to Herman Haupt, Superintendent of Transportation. On the 8th of January, 1851, Mr. J. Edgar Thomson having resigned as General Superintendent, Mr. Haupt was promoted to that vacancy and Mr. Lombaert to succeed Mr. Haupt. The latter resigned November 1, 1852, and Mr. Lombaert succeeded to the duties, retaining the title of Superintendent.

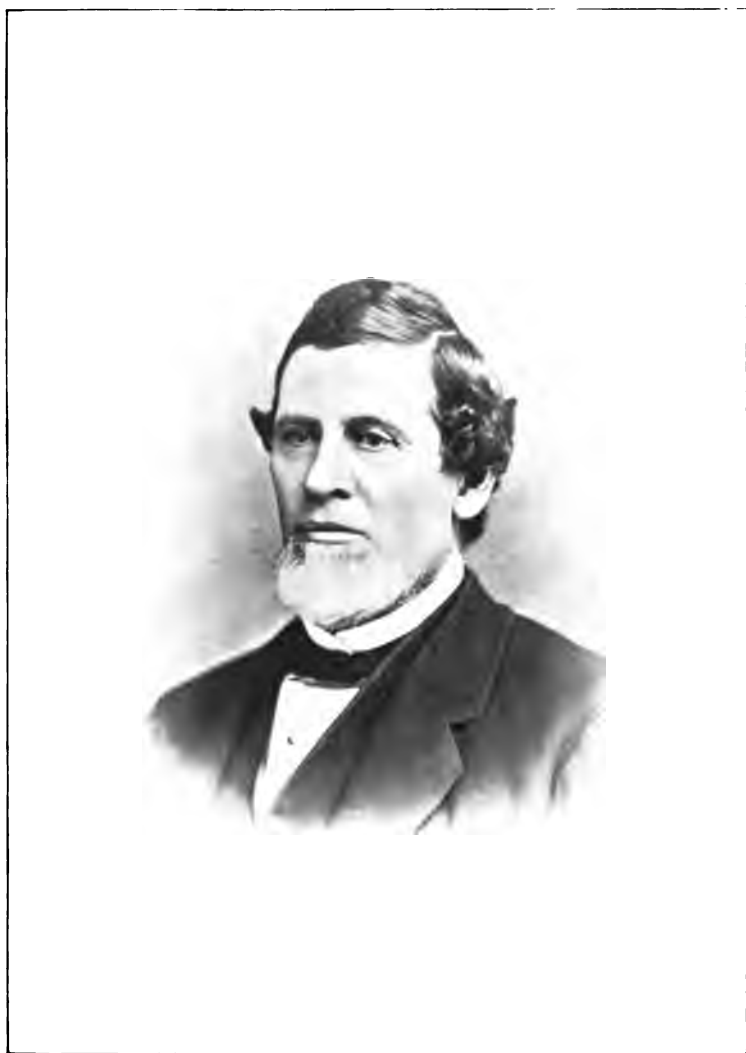
The road, when completed, was given to him to elaborate its organization and operate. That involved directing details covering almost all phases of railroad management, which in these days of enlargement are distributed among the Transportation, Engineering, Comptroller's and Commercial Departments. He, however, was equal to it all.

The offices were moved to Altoona, December 1, 1852, where he organized and elaborated a transportation department which, in

general outline, is followed to this day. There he toiled with the great problems in transportation which had been presented by the successful subduing of the mountain ranges for railroad purposes. Discipline, order, regularity, solidity of structure, development of the country through which the road passed—all in their general scope had to be considered by him, whilst the almost innumerable details of train movement and equipment passed constantly in panoramic view before him. In the midst of his great responsibilities the most minute detail did not escape him, as is attested by the fact that many of the comforts and conveniences now enjoyed by railroad passengers were first introduced by him—the saloon, the water-cooler, the heater, the lamps in the coaches, were all children of his brain. The chair car was another innovation he introduced on the road in 1855. These cars were run on the night lines, and were fitted up with a sort of reclining chair, with iron frames, plush upholstered, each one having on it a head-rest and notches, so that three different positions in reclining could be obtained. The chairs were placed in the cars in pairs, but each chair was independent of the other. There were four chairs across the middle of the car, the aisle separating the pairs. These cars were run originally between Harrisburg and Pittsburgh; but in 1858, when the changes in Philadelphia, and on what is now the Philadelphia Division, were made, enabling cars to be run through from Pittsburgh to Philadelphia, their run was extended to the latter city. They continued in use until 1871, when the Pullman sleepers supplanted them, a thing the Woodruff sleepers, which had also been in use, could not do.

His personal staff was modest, but strong. Robert Pitcairn represented him in the office, and George B. Cramer in the yard. With only these two men, or rather this boy and man near him, he felt himself equal to any emergency which arose.

On the 1st of August, 1857, when the main line of the Public Works had been acquired, they were placed under his jurisdiction, and his title changed to General Superintendent. The increased business which the purchase brought to the road demonstrated that the duties devolving upon the General Superintendent should be divided. They were therefore separated into two divisions, to



HERMAN J. LOMBAERT

one of which was connected the supervision and auditing of all the accounts, and to the other the supervision of all the sub-departments of the active operations of the road. The officer in charge of the former was to be known as Comptroller and Auditor. To that office Mr. Lombaert was chosen by the Board on December 26, 1857, and assumed charge January 1, 1858. President J. Edgar Thomson, in announcing the appointment to the stockholders, said of the appointee: "The thorough acquaintance of railroad accounts possessed by this gentleman, and his minute knowledge of the value of all articles of railway consumption, added to his high character for integrity, peculiarly fit him for this post." In addition to building up his particular Department, his varied experiences and practical mind made him a trusted counsellor of the President. In 1861 Vice President Thomas A. Scott was made Assistant Secretary of War, and, whilst he did not relinquish his position on the road, was necessarily absent a great deal. To meet that emergency Mr. Lombaert was, on October 9, 1861, made Acting Vice President, to serve during Mr. Scott's absences. On May 27, 1862, he was elected temporary, and in February, 1864, permanent Second Vice President, having general supervision of the Treasury, Accounting and Transportation Departments. In 1871 he was elected President of the American Steamship Company. The arduous duties which devolved upon him began to weigh heavily, and finally to such an extent that his health became so seriously impaired that in 1872 he was constrained to withdraw from all active business and lay down his position in the Pennsylvania Railroad Company's service.

He was very strict in minute matters and details, and always watchful of the Company's interests. He was a good judge of men, and a man once established in his confidence was honored with his trust. But if that confidence was lost, it was very difficult, if not impossible, to re-establish it. He was rather distant in manner to those with whom he was not well acquainted, but to those who enjoyed his confidence he was free and open. A consistent member of the Presbyterian Church, he was very active in organizing the First Presbyterian Church of Altoona, and gave liberally of his means in the relief of distress.

Inflexible integrity, strict discipline and a discriminating judgment characterized all his official acts. Though of an undemonstrative and retiring disposition, he was greatly esteemed by all, and was regarded with affection as a true and faithful friend. Blameless in his life, kind and considerate in his actions, he justly commanded, alike from superiors and subordinates, their highest consideration.

J. N. DU BARRY.

Among the many able men who assisted in achieving the success which has crowned the progress of the Pennsylvania Railroad Company, none are entitled to more loving remembrance and just appreciation than Joseph N. Du Barry. His history as a railroad man is co-extensive with that of the Company with which he was connected from the time when, a youth of seventeen years of age, he entered the Engineer Corps, until he reached the Second Vice Presidency of the Company, and passed over into the Unknown Land.

Mr. Du Barry was born November 19, 1830, in Bordentown, N. J., and was the son of Edmund L. Du Barry, M.D., a surgeon in the United States Navy, and Emma (Duane) Du Barry, a daughter of William Duane, editor of the old Philadelphia "Aurora," both parents being born in Philadelphia. Mr. Du Barry received his classical education in Washington, D. C., and by natural inclination, at the age of seventeen, entered the railroad service, which was just then beginning to attract the serious attention of young men as a line of occupation promising a good future. This was in 1847, and from that time to 1850 he was engaged as a rodman, accompanying various corps of engineers in the preliminary survey of the Pennsylvania Railroad between Altoona and Pittsburgh.

The undertaking was an arduous one for the Engineers of those days, and necessitated the overcoming of many obstacles, the chief one being the passage of the Allegheny Mountains. The long continuance and perplexing nature of the work gave him an experience which in thoroughness and variety could not have been gained in any other field then open to railroad experiment in this country. Profiting by it, he acquired a knowledge which soon commended itself to his superiors, and resulted in his speedy advancement. In



J. N. DuBARRY

1850 he was made Assistant Engineer of Construction, and he served in that capacity until May 7, 1852, when he was made Principal Assistant Engineer of the Eastern Division, Philadelphia and Erie Railroad, surveys and location. In May, 1853, he became Principal Assistant Engineer of the North Pennsylvania Railroad, location and construction, in which position he remained until 1856, when, the work being practically completed, he accepted an advantageous offer from the West and removed there. This post was that of Assistant Engineer of Surveys and Construction of the Pacific Railroad of Missouri. He filled it for over two years, performing very satisfactory work. In September, 1858, he was appointed Engineer of the Western end of the Pittsburgh, Fort Wayne and Chicago Railway. The road was built to Chicago under his charge, and he was made Superintendent of the Western Division, extending from Crestline to Chicago, 280 miles. From December, 1861, to July, 1867, he was General Superintendent, and from the latter date to February, 1875, Vice President of the Northern Central Railway Company. He was then appointed Assistant to the President of the Pennsylvania Railroad Company, and in October, 1882, was elected to be Third Vice President of the latter Company. In July, 1886, he was promoted to be Second Vice President, a position he filled with great ability until his death, which occurred on December 17, 1892.

At a meeting of the Board of Directors of the Pennsylvania Railroad Company, held shortly after that event, the following minute was adopted :

"It is with profound sorrow and deep regret that this Board recognizes the loss which they, together with the Pennsylvania Railroad Company, have met in the death of Mr. Joseph N. Du Barry, their late associate and Second Vice President. Mr. Du Barry's name, good works, and faithful, efficient services, are as 'household words' in the history of the Pennsylvania Railroad Company. That Company was his *alma mater*—so he believed—so he served it to the last. He entered upon his late connection with the direct affairs of the Pennsylvania Railroad Company in 1875 as Assistant to the then President, Mr. Thomas A. Scott, and shortly after was elected Third Vice President, charged with the important engineer-

ing duties incident to general construction work, and especially to that connected with the survey, location and construction of new lines and branches."

Conscientious performance of duty was Mr. Du Barry's aim in life, and whatever honor, position, power or wealth came to him, came in consequence of such aims, and not from the strifes and intrigues of ambition. Having passed into the beyond, the issues of his performances are monuments of his conscientiousness.

HENRY HOWARD HOUSTON.

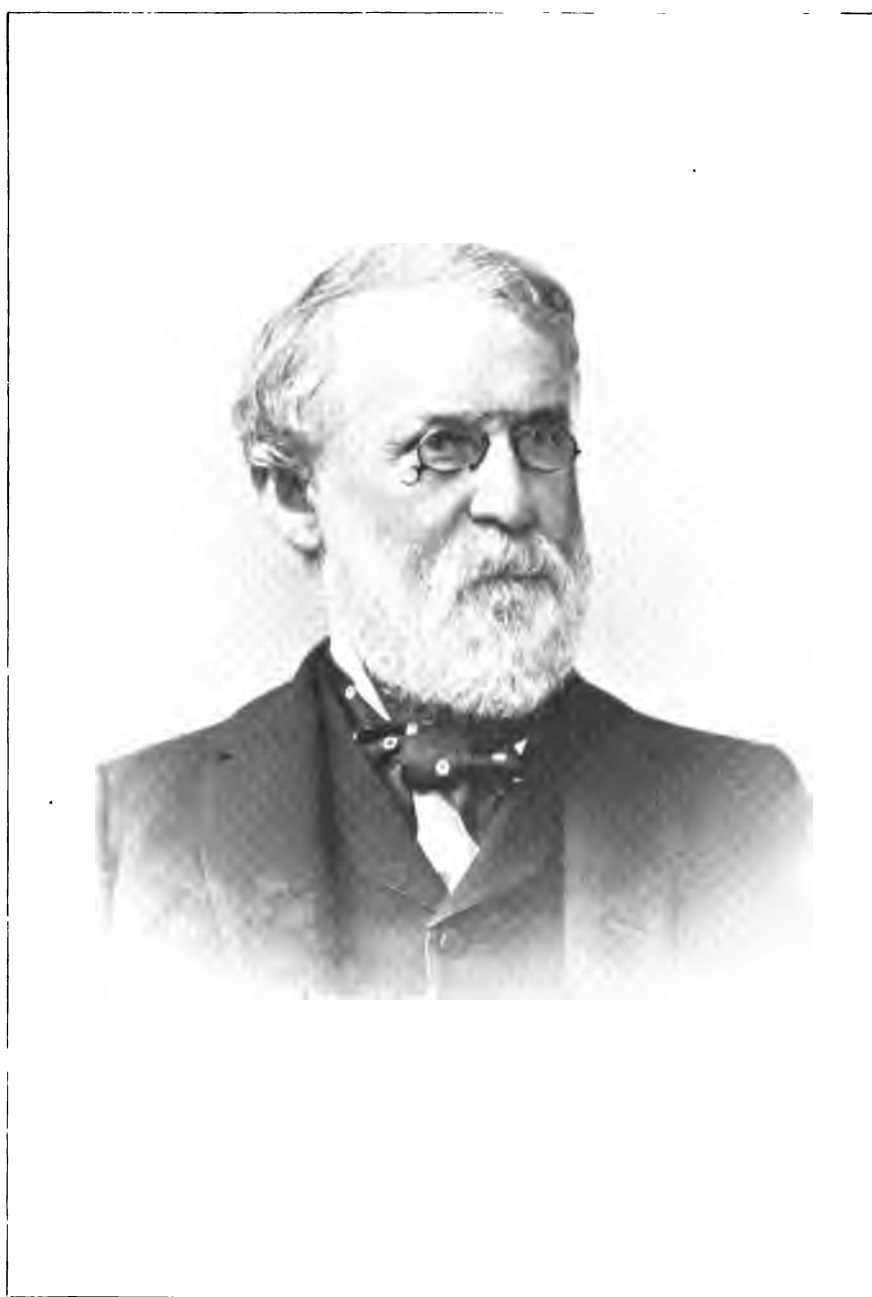
On June 21, 1895, as the cadence in the tones of Thursday's midnight bell lingered around the parish tower, the spirit of Henry Howard Houston, in the sweet and lovely manner it was wont to appear to men, quietly took its flight, leaving the impress of its purity on family, friends and community.

Mr. Houston was very properly termed the father of transportation interests, and withal was a leading citizen, eminent as a financier and philanthropist.

His was a fine specimen of Christian manhood of the rarest type. From the time his youthful feet moved over the rough roads or trod the Susquehanna's shores in York and Lancaster Counties, through all the storms and vicissitudes of a long and useful career, until that last sad night on Wissahickon Heights, his life was lived unsullied.

He was the youngest son and second of five children of Samuel Nelson and Susan Strickler Houston, and was born on Houston farm at Wrightsville, York County, Pa., October 3, 1820.

Although descending from an illustrious ancestry whose deeds were performed and fame was known in different climes, he depended upon honor, love and duty, and not upon escutcheon, for success. The clan Houston from which he descended, and which espoused the cause of Wallace, existed before the days of that doughty chieftain. The younger sons of the original family emigrated to the North of Ireland in the seventeenth century. A portion of the family came from there to Pennsylvania between 1725 and 1730, and settled in Lancaster County. From them branched the Houstons of Virginia and Tennessee, the most conspicuous one



HENRY HOWARD HOUSTON.

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being the hero of San Jacinto, General Sam Houston, of Texas. His grandfather was Doctor John Houston, of Pequea, Lancaster County, Pa., a distinguished surgeon in the Revolutionary army, and his father, Samuel Nelson Houston, served his country during the second war with Great Britain. There was, however, none in any branch of the family, prominent though it was, who added so much lustre to the name. His schooling was received in the country schools of his day, from which he emerged at fourteen years of age and entered the general store of Mr. John S. Futhey, in Wrightsville. Mr. Futhey was a man of large means, great industry, strict integrity, and of high moral character. Always on duty in business hours, his employees were not allowed to falter in performing their duties. The merchandise in which he dealt covered almost all the needs of man, and its variety gave the employees an opportunity for obtaining knowledge of products and material rarely obtained in one establishment. Mr. Houston remained in that employ from 1834 to 1839, laying in a fund of information regarding merchandise in its relation to transportation which became invaluable to him in after years, when the railroad commanded his services. During the time he was employed in Mr. Futhey's store the Baltimore and Susquehanna Railroad, from Wrightsville to York, the Tide Water Canal, from Wrightsville to Havre-de-Grace, and the dam in and the towing path bridge across the Susquehanna at Columbia were being constructed, the supplies and laborers for most of which were furnished the contractors by Mr. Futhey. In 1840, at the age of twenty, Mr. Houston went to Lucinda Furnace, in Clarion County, where he remained until 1843, when he joined Edmund Evans in rebuilding and operating Horse Creek Furnace, on the Allegheny River, in Venango County. Leaving there in January, 1845, he returned to Columbia, remaining until early in 1846, and then started upon a tour of the Southern and Western States, from which he returned in December of that year.

In 1847 he came to Philadelphia and entered the canal and railroad transportation office of David Leech & Co., remaining for three years, and becoming acquainted with the needs in transportation service. His keen eye early saw the change of the current of commerce; that the political disturbances in Europe were sending

large bodies of intelligent emigrants to this country ; that the treaty of peace with Mexico had given to the United States not only the imperial State of Texas, but also the large and wealthy Commonwealths on the Pacific Coast ; that these causes were filling up the country beyond the Alleghenies and up to and over the Rocky Mountains with population, and creating an interior commerce which would soon reach monumental proportions. Seeing this, he determined to devote his abilities and energies to securing to the City of Philadelphia a full share of the benefits to arise. So well did he succeed that, as the white sails of vessels moving to and from foreign climes disappeared from our wharves, the freight cars there, at the plants of our manufacturers and at the many centres of trade and traffic, increased a thousandfold. It is to the efforts and transportation methods of Mr. Houston that Philadelphia is very largely indebted for being rescued from the provincial town into which it had crystallized when internal commerce, supplanting its foreign rival, was being wooed away from its doors by the more active cities of New York and Baltimore. And it is to that rescue that Philadelphia is a great city to-day. In organizing and planning to exchange the manufactures of Philadelphia for the products of the fields, mines and forests of the interior, he met with active and sleepless competition from the rival lines of transportation interested in New York and Baltimore, and greatly handicapped by the unwise if not suicidal policy of the Commonwealth of Pennsylvania, which imposed a State tax of three mills per ton per mile on tonnage which might pass over the Pennsylvania Railroad, and exacted high tolls on all freights passing over the Philadelphia and Columbia Railroad to and from Philadelphia. His subsequent official railroad career is best told in the minute placed by the Board of Directors in the records of the Pennsylvania Railroad Company on June 27, as follows :

“At a meeting of the Board of Directors of the Pennsylvania Railroad Company, held this day, the President announced the death of Mr. Henry H. Houston, which occurred on Friday, June 21, 1895, in the seventy-fifth year of his age, at his home, near Wisahickon Heights, Philadelphia, and stated that his long connection with the service of the Company and his devotion to its interests

make it especially proper that a full record should be made upon its minutes of the deep sense of obligation felt by those who have had its management in charge, and who realize the exceptional ability with which he discharged the duties intrusted to him, and the conscientious regard which he at all times manifested for the welfare of the shareholders.

"Appointed Freight Agent at Philadelphia in 1851, he had before that time acquired, in the service of David Leech & Co., and through the management of their affairs in Pennsylvania and New York, a valuable knowledge of the business of transportation, and his first duty was to organize and manage the freight line which this Company was establishing between Philadelphia and Pittsburgh. So well did he accomplish this work that on November 23, 1852, he was appointed General Freight Agent, and in that responsible position displayed rare powers of administration and achieved most advantageous results for the Company. The organization then put in force has practically continued until this day, and the impetus then given to it has been preserved through almost half a century. Mr. Houston discharged the exacting duties of this office until the 1st of July, 1867, when he felt that his health required relief from such severe labor. The Board with great reluctance accepted his resignation, and in doing so placed upon the minute their cordial recognition of his long and faithful services, his thorough knowledge of the affairs of his department, and his energy and activity in the attainment of results so material to the prosperity of the Company.

"Mr. Houston then became one of the promoters and managers of the Union Line, one of the first organizations to run through cars over the lines of the Company and its connections between the Atlantic Coast and the West, and also of the Empire Line, which furnished like facilities in connection with the Lake Shore and its allied roads. These fast freight lines were of exceptional value to the Company in developing a rapidly increasing through traffic, and during his whole connection with them, and with the Lake and Ocean lines, which work in harmony with this Company's interests, and which extended his sphere of activity over two continents, he was ever alert and watchful in promoting the interests of the Pennsylvania Railroad Company.

"In March, 1881, he was elected a member of this Board, and has been one of its most valuable members. He was also a Director of the Pennsylvania Company, the Pittsburgh, Cincinnati, Chicago and St. Louis Railway Company, and of many of the subordinate organizations of this Company, where his time and labor were freely given for the benefit of your properties.

"It is hardly necessary to say that the intimacy so long existing, both personally and officially, between him and those associated with him in the management of the Company, not only evidenced the unswerving integrity that underlaid his character, and the strong, helpful and sagacious counsel that was ready for any emergency, but also establishing such close and affectionate relations that their severance has brought the keenest sense of pain to those who were honored by his friendship. In a nature essentially modest and lovable there was ingrained such a conscientious devotion to duty and such a prompt recognition of responsibility that he never stopped to count the cost of doing what he conceived to be right; and it can be said of him, as it can be truly said of few, that he carried into his daily life an unselfish and consistent regard for the happiness of others which will long keep him in affectionate remembrance.

"It was his privilege to see the Company with which his busy life was so closely connected, and the germs of whose prosperity he so materially aided to develop, become one of the greatest transportation agencies of any country; and it may well be doubted whether, if the choice could have been left to him, he would have wished for any other death than that which came to him almost painlessly, in the midnight hours, after a day spent in the discharge of his customary tasks, and after a life largely spent in giving to others the best fruits of a ripe experience and an honest performance of high and responsible duties. Certainly, if his career proves anything, it demonstrates that it is possible to bring into the centre of business activities the example of an earnest Christian life, full of helpful influence and faithfully cognizant of its duties and responsibilities to others."

Mr. Houston was actively connected with many other interests besides those of the commercial world, frequently taking a promi-

nent place in many movements connected with the public welfare. He contributed largely to the enhancement of the beauty of that popular Philadelphia suburb, Wissahickon Heights, it having been mainly through his business sagacity and forethought that the place was ever built up and beautified.

He erected many homes in the vicinity of his residence, and among the larger buildings that he built were the Wissahickon Inn and the Protestant Episcopal Church of St. Martin's-in-the-Fields. Among the many charitable gifts that he made is Houston Hall, of the University, as a memorial to his son, Henry H. Houston, Jr., who died whilst traveling in Europe several years ago, which was erected at a cost of \$100,000. He made many other donations to the University, of which he was a Trustee, as well as to other institutions, including the Washington and Lee University, of which he was also a Trustee. But the manner of his giving was always so reserved that many of his gifts were known only to those who received them. He was one of the most liberal users of wealth in the city, and as such was largely instrumental in the building of St. Peter's Church, on Wayne avenue, Germantown.

In St. Thomas' churchyard, on a hillside overlooking the charming scenery in the Whitemarsh Valley, always clothed with peace and contentment, and freed from the noises of the busy world, and on the afternoon of St. John Baptist's Day, June 24th, with the same simplicity which marked his walk through life, and in an atmosphere warm and genial, fruitful of love, so typical of him, his remains were laid to rest.

His aversion to publicity was remembered in making arrangements for the funeral, and the sad ceremony was performed with a becoming unobtrusiveness. Short services in the Houston country residence on Cherokee avenue, Wissahickon Heights, were conducted by Bishop Whitaker, Rev. Dr. Theodore S. Rumney, rector of St. Peter's Protestant Episcopal Church, Germantown, of which Mr. Houston was a member and churchwarden, and Rev. Jacob Le Roy, rector of St. Martin's-in-the-Fields. They were attended only by the members of the family and a few intimate friends. At their conclusion the casket was sealed, placed in the hearse, and, followed by members of the family in carriages, taken to St. Martin's-in-the-

Fields, only a short distance away. In the church were assembled many of the numerous friends of the deceased, including nearly all the prominent men in railroad, banking, transportation, educational and charitable circles.

No other services were held but the simple yet impressive burial service of the Episcopal Church.

As the casket was taken in the church door the officiating clergy and vested choir preceded the remains up the central aisle to the chancel, the Rev. Dr. Rumney, with voice almost broken by his emotions, reciting the opening words of the service. The casket was deposited in front of the chancel. The pulpit, lectern and font were obscured by palms, ferns and other plants exquisitely arranged, and the flowers upon the altar were beautiful in their suggestiveness of purity. Hymn 243, whose opening verse is :

" On the Resurrection morning
Soul and body meet again ;
No more sorrow, no more weeping,
No more pain,"

was sung with effect by the choir ; the Creed and Lord's Prayer were then repeated by the clergy and people ; Rev. Jacob Le Roy read the lesson ; Rt. Rev. O. W. Whitaker, Bishop of the Diocese of Pennsylvania, said the prayers ; and the services closed by the choir singing, as it withdrew, Hymn 176, the first verse of which reads :

" For all the saints, who from their labors rest,
Who Thee by faith before the world confessed
Thy Name, O Jesus, be forever blest. Alleluia."

The remains, accompanied by the family and clergy, were then conveyed to Whitmarsh, Dr. Rumney committing the body to its place of rest.

The honorary pall bearers were George B. Roberts, Clement A. Griscom, William H. Barnes, Benjamin B. Comegys, Edmund Smith, Colonel Henry D. Welsh, F. J. Firth, Charles C. Harrison, James S. Swartz and Joseph S. Perot.

Such in brief is the record of a useful life, which lasted beyond the allotted time of man. What the impressions are that it left

upon the brains and hearts of men may be gleaned from the many memorial tributes paid by the newspaper press, corporations interested in transportation and manufactures, and institutions devoted to learning, spread of the Gospel, and alleviation of personal and physical distress.

The Philadelphia Maritime Exchange, of which he had been a member for many years, adopted the following resolution as a tribute to his memory :

"Resolved, That it is befitting that the members of this Exchange should publicly record their heartfelt testimony to the character of this lovable Christian gentleman, whose abilities, virtues and unostentatious benevolence, exercised in countless ways for the welfare of the community among whom his life was spent, placed him in the front rank of the citizens of Philadelphia—and, it might be said, in the foremost of them all. For half a century closely associated with important enterprises which have contributed in high degree to our city's growth and prosperity, the passing of the years only served to endear him the more to the hearts of his fellow-citizens, who yet scarcely appreciate all they owe to his wise counsel, great business sagacity, breadth of view and large-heartedness."

The newspapers of Philadelphia, with those from near and distant parts of the country, spoke of his death feelingly as a great loss. These expressions are fully represented in the following quotations from the "Ledger" and "Times" editorials :

"It is difficult to measure the public loss or to give expression to the public regret when a citizen having such conspicuous worth as Henry H. Houston possessed dies. He was closely associated with enterprises which have contributed vastly to the city's growth, and which have enhanced its importance throughout the country. The value of his guidance, experience and counsel, his unerring judgment and business prescience, can only be fully known by those intimately associated with him in great affairs. While yet quite a young man he was charged with the important duty of organizing the Freight Department of the Pennsylvania Railroad, and to him belong the credit, honor and prestige which are due to men who organize success in new fields. He had a genius for de-

tails and a broad view of the possibilities of railway transit which were of inestimable service to the Company in blazing the way for its subsequent prosperity in expanding the city's trade and creating wider opportunities for all its business men. Herein he was a public benefactor. Had his sphere of usefulness been confined to these exploits alone he would have accomplished a monumental achievement for this community. He had swift business intuitions, which probably would have brought success to almost any undertaking subject to his intelligent direction. It was fortunate for the great corporation that in its infancy the energies of his earlier manhood were devoted to its upbuilding.

"The public scarcely appreciates the benefit it receives from its sagacious captains of trade and industry and the far-sighted men who provide the ample means of distribution for the industrial products. These achieve much more than personal success. Men of this stamp rarely apply themselves to a single interest. Mr. Houston was inevitably drawn into numerous important enterprises, where his abilities and good judgment invariably asserted themselves.

"Shunning publicity, simple in his manners and habits of life, without assumption, mindful of his obligations as a citizen, jealous of the interests of his State and city, avoiding no duty, appalled by no responsibility, a good man has departed. In church activities, in business, in society, he touched the life of the city at many points, and wherever his associations have been, willing tribute will be paid to his kindness, his forbearance, his courtesy, his probity and his sterling manhood."—*Philadelphia Ledger*.

"We like to think of these traits of Mr. Houston's personality, the strong business energy which he combined with a quiet and unselfish philanthropy, as characteristically Philadelphian. Yet in this or in any other community men of his type are rare. While he was amassing great wealth for himself, his enterprises were always upon a broad scale of public advancement. He bore a most important part in building up the transportation system of the State, and had earned a wider recognition for his services in this respect than he was ever likely to receive or seek.

"But all this time Mr. Houston's private generosity, of which nobody ever heard, was practically unstinted. If he let his left

hand know what his right hand was doing he never let the public know, and the ostentatious gifts of many a widely-advertised professional philanthropist seem contemptible in comparison to those who know the silent and almost shrinking modesty of Harry Houston's free-handed liberality. With the same absence of ostentation he was a man of sincere and earnest religious faith, and his gifts to the church of his obedience are but partly represented by those that are known in the community; in the far West and in the South, many a toiling missionary has reason to commemorate his name with gratitude. In the cause of education, also, and notably in his services to the University, of which he was one of the Trustees, Mr. Houston's work has been generously extended.

"And yet so little did he seek applause or personal distinction of any kind that his name was not one of those that commonly figure in lists of leading citizens, and it is probable that Philadelphians generally will not at once recognize, when they read to-day of Mr. Houston's death, how great a loss this community has sustained."—*Philadelphia Times*.

Columbia, where he was well known and beloved, and where his youthful days were passed, received the announcement of his death with profound sorrow; a pall of gloom hung over the town and its inhabitants mourned the loss of a friend and benefactor, and as the obsequies were being held far away, its bells tolled a solemn requiem. What the newspapers of the town, reflecting the feeling of the citizens, said, is embraced in the following:

"Mr. Houston was financially the most successful man whom Columbia produced. For this success he would not require more than passing notice. The fact that, when his tide of prosperity rose so high, he did not forget his birthplace and the scenes of his early struggles, entitles him to praise, and the additional fact that he remembered his native town by the liberal gifts which he bestowed in public and private secures for him the gratitude of the people. Many poor persons, whom he knew when a boy and a young man, have quietly received gifts from him. The churches of the town have been his beneficiaries to an extraordinary degree, so that, as he expressed it, 'there might be moral safeguards placed around the young which were not at hand when he was a boy.' In new in-

dustrial enterprises he was always the energetic spirit, and Columbia is industrially to-day what she is because Mr. Houston was a liberal subscriber to the stock of its mills and factories.

"The people of Columbia owe him so much that some public notice should be taken of his passing away. The church bells should be tolled at the hour of his burial, and a meeting of the people should be held to do him honor. This, not only to honor him for what he did, but to give impetus to the real subject of its benefactions, namely, to spur on the young men of Columbia to higher and better aspirations."—*Daily News*.

"Mr. Houston, in his benefactions, was sublime. Every Protestant church in this place, with the exception of the Methodist and one or two of the Lutherans, was assisted financially by him, and no doubt his aid would have been extended to them had they called for it or needed it.

"His kindness to his kinship, however remote, was extraordinary, and his departure will leave a void in that direction that will never be filled.

"His investments in our industrial enterprises, and his contributions to any and everything originating in our town, either for business or pleasure, were bounteous, and always bestowed with a word of good cheer."—*Independent*.

The sentiment of the religious element in Columbia was best voiced by the official boards of the Presbyterian Church, who recorded their feelings in the following language :

"We esteemed him a man of noble type, whose kindly spirit and active interest in the welfare of his fellow-men, of whatever station in life, endeared him to many hearts, whose liberal and multiplied benefactions brightened many lives, and marked him a faithful steward of Jesus Christ, and whose honorable and successful career is a guide and inspiration to manly effort.

"We cherish his memory for his warm friendship towards our community, maintained through long years of residence elsewhere, and manifested in substantial aid to most of its best enterprises, one of which is our present beautiful sanctuary, which takes the place of the one which was the church home of his parents.

"While mourning our loss, we thank God for the gift to the

church and to the world of a man in whose character was so much of the beauty of Christ.

"We extend our sympathy to the stricken hearts within his immediate household and broader family circle, and rejoice in the hope assured by the Word of God concerning them that are Christ's, that to be 'absent from the body' is to be 'present with the Lord.'"

With a character having so many and varied traits of excellence it is difficult to select any one to dwell upon and commend; but it was not for the purpose of inviting discussion or comparison that emphasis was placed upon his citizenship, the great value of which to the city of his adoption and the State of his nativity is attested on every page of his life's history.

Believing that posthumous dispensing of charity was not in accord with the Divine injunction, his benefactions, liberal in amount and broad in distribution, were applied in his lifetime and personally directed.

It is seldom that a life whose activities began at fourteen, continued for sixty years, and lived amidst the rush, the strifes, the turmoils, the antagonisms and ambitions of business environment, closes with so many friends and no foes around it, and about whose successes even envy did not clamor, and at whom malice never aimed its shafts of slander.

If the seeker after a pure and successful manhood desires a model to set his course by, let him look no further than at the life and character of Henry Howard Houston; if Philadelphia desires to perpetuate in marble or bronze the foremost citizen of its municipality, who did the most to advance its prosperity during the past half century, it will erect his statue in the most conspicuous spot within its boundaries; if the Convention of the Protestant Episcopal Church in the Diocese of Pennsylvania is true to its traditions, it will cause the erection of a pure white mural tablet to his memory; Pennsylvania will record him on her historic rolls as one of her honored sons; the poor will irrigate his grave with their tears; and so long as the Pennsylvania Railroad Company exists as a corporation his name will survive as a source of its high standing and prosperity.

EDMUND SMITH.

At the side of the bier which contained the mortal remains of Henry Howard Houston stood Edmund Smith, a lifelong friend and business companion of the deceased, in the seeming possession of a robust frame, indicating a long-continued useful career. But the dark angel appeared, dropped his pall over that form, and Edmund Smith accompanied him to the unknown land whose mysterious depths we all dread to explore, but to which all must go, and, in going, are only happy when our hopes rest, as his did, on the atoning power of the humble Son of Nazareth.

On Thursday, July 25, 1895, Mr. Smith was stricken with apoplexy in the Rector Street Elevated Railroad Station, New York. He was conveyed to the Hudson Street Hospital, where, after all was done that lay in the scope of love and human power to do, the end came on Wednesday, July 31, 1895.

Mr. Smith was the son of Robert Hobart and Mary Potts Smith, both native Philadelphians, and was born in Philadelphia, April 4, 1829. His early education was received at the Fourth Street Friends' Academy, Northwestern Public School, and the Philadelphia High School. In his early boyhood he engaged as a clerk in the counting-house of Weiss & Schively, after which, for two years, he was engaged in the wholesale drug business. In June, 1847, being but a few months over eighteen years of age, he entered upon his long and honorable career in the service of the Pennsylvania Railroad Company as a rodman in a corps of engineers surveying, locating and supervising the construction of that portion of the road lying between Huntingdon and the summit of the Allegheny Mountains. He served in road and shop construction until January, 1855, when he was elected the Secretary of the Company, an office he held until May, 1869, when he was chosen Third Vice President. In March, 1873, the financial affairs of the world being in a disturbed condition, the necessity for having a natural as well as a trained financier at the head of the Treasury Department of the Company arose, and led the Board of Directors to urgently and unanimously request Mr. Smith to accept the office of Treasurer. Resigning the Vice Presidency, he acceded to the request and discharged the duties of Treasurer until September, 1882. The



EDMUND SMITH

emergency having passed, he was elected First Vice President, succeeding A. J. Cassatt, resigned. On June 1, 1888, after serving the Company for forty-one continuous years, he resigned from its employ to engage in private enterprises. Upon his severing his official connection with the Company, the Board, recognizing his long and faithful service and his devotion to the Company's interests, ordered a minute of their appreciation to be made in the record.

Mr. Smith was connected with other large corporate and private enterprises in transportation and manufactures, but the duties which consumed the greater part of his very busy life were in connection with financial problems. Without lowering the estimate of value of his knowledge or the character of his service in other lines, he was pre-eminently a financier, with an intuitive financial knowledge, which seemed to guide him to correct conclusions as the loadstone surely attracts particles of steel to its embrace. In consequence, his counsel was eagerly sought and his advice rarely declined. With the limited advantages of the schools, as narrated above, Mr. Smith moved steadily forward by working hard, keeping his habits correct, and by being suave of manner. His life and achievement should be impressed on the minds of the young men in the service, and studied as a lesson in which is taught the truth that merit always meets its reward.

Mr. Smith will be long remembered on the lines of the Pennsylvania Railroad and esteemed as one always true to duty, faithful to trust, and unswerving in the right.

Peace to his ashes.

JOHN SCOTT.

On the twenty-ninth of November, 1896, in the calm of a late Sunday evening, the soul of John Scott passed from time to eternity, strong in the hopes of a glorious resurrection.

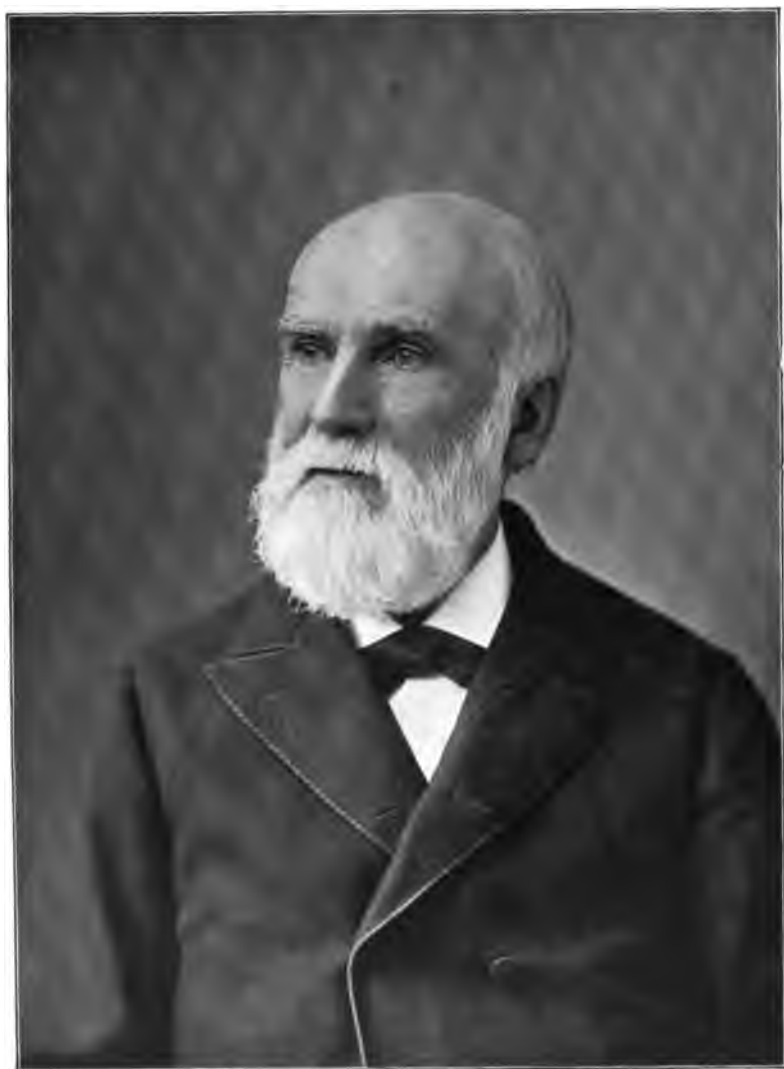
John Scott was more than an ordinary citizen, and had spent more than man's threescore and ten years on the stage of life, striving to make the world better by his living in it. He was ever a student, ever seeking for truths, ever advising along the lines of justice and right. His habit of thought was pure, his motives sincere, his acts prompted by sound judgment and broad charity, and when the

tomb closed upon his mortal remains it shut out from the participation in the world's activities one of the strongest, best and purest of men—a Christian citizen—whose blameless life was an honor and an inspiration to the age in which he lived.

Standing in the front rank of his profession, everywhere recognized as one of the most learned, able and accomplished members of the legal fraternity, he systematized and broadened the Legal Department of the Pennsylvania Railroad Company, and placed it upon the high intellectual standard it has attained.

Mr. Scott was born in Alexandria, Huntingdon County, Pennsylvania, July 14, 1824, obtaining his rudimentary education in that village. His father was a tanner, and at the early age of fourteen the son assisted in the business. In November, 1842, he registered as a law student in the office of Hon. Alexander Thomson, father of Mr. Frank Thomson, First Vice President of the Pennsylvania Railroad Company. Admitted to the bar in 1846, he located his office in Huntingdon, remaining there until the completion of his term in the United States Senate in 1875. In addition to a large practice which occupied his time in those years, he served as Prosecuting Attorney, member of the Board of Revenue Commissioners, a member of the Legislature, and a member of the United States Senate. Mr. Scott entered the service of the Pennsylvania Railroad Company in 1857 as Associate Counsel with Cyrus L. Pershing (now Judge), then of Cambria County, in the trial of a case which was ably contested, but decided in favor of the Company, the decision upon appeal being confirmed by the Supreme Court. He then became Special Counsel for the Company, and continued in its service until 1869, when he resigned to accept the position of United States Senator, succeeding Hon. Charles R. Buckalew.

At the close of his Senatorial term in 1875 he re-entered the service, and, removing from Huntingdon to Pittsburgh, took charge of the legal business of the Pennsylvania Company's lines west of Pittsburgh. He organized the Legal Department for those lines in June, 1875, and upon the resignation of William J. Howard, Esq., in November, 1877, he was called to Philadelphia to take charge of the Legal Department of the Pennsylvania Railroad Company as General Solicitor of that Company and its allied lines.



JOHN SCOTT

For eighteen years he served the great corporation and the public faithfully and well in that position. He was something more than a legal adviser—he was a legal interpreter. During that period public unrest and public agitation presented many knotty problems in transportation that unless handled with care and thoughtfulness promised to lead to great friction, if not disaster. As the problems arose and were presented to John Scott, he interpreted the law for their solution, and became an important factor in clearing up many clouded points in the relations of transporters and people to a continental and international traffic. Having reached the patriarchal age of seventy-one, with failing health, he determined to lay down the responsibilities of his office, for the purpose of supplementing an honorable and useful public life by recreation and travel. On February 1, 1895, he retired as General Solicitor, carrying with him the love and admiration of all those who knew him or had business relations with him. The Company, however, would not permit him to sever his relations with it, and retained him as General Counsel.

At a meeting of the Board of Directors of the Company, held on January 23, 1895, the following minute in reference to his resignation was unanimously adopted: "The Board of Directors, in accepting the resignation of the Hon. John Scott as General Solicitor of this Company, desire to place on record their appreciation of the value of his services, and their sincere regret that, by reason of failing health, he feels the necessity of giving up the important duties so long under his charge.

"Mr. Scott has been connected with the Legal Department of the Pennsylvania Railroad Company and its allied lines for a period of thirty-six years—more than twenty of these years at the head of that Department as General Solicitor. He has discharged with rare ability and zeal the important duties of his office, gaining for himself and this Company a reputation for high professional management of the many and important legal questions incident to the vast affairs of the Company.

"The Board of Directors hope that, in the performance of the less arduous duties of a counsel of the Company, to which office he has been this day elected, he will find such comparative freedom from his late responsible duties as will enable him to fully recover

his health and give the Company for many years to come the benefit of his sound counsel and advice."

His public life was actively passed during the most stirring and exciting period of the country's history. Its tale is well told in the following, taken from an editorial in the "Philadelphia Times" of December 1, 1896 :

"In early life he was an active Democrat, and as early as 1852 he made himself known throughout the State as a political leader of great ability when, as a member of the Democratic State Convention, he prepared a protest against the nomination of James Buchanan for the Presidency that was signed by some thirty members of the body. It was regarded as one of the most potent political deliverances of that time, and certainly did much to make the nomination of Buchanan impossible in the National Convention that year.

"When secession attempted the dismemberment of the Union, Mr. Scott was one of the most patriotic of war Democrats. In 1861 he was elected to the Legislature by a practically unanimous vote as a war Democrat, having been presented by the Republicans of his county. While the people of the present have little recollection of the important movements made in that Legislature, those who can recall the grave problems then presented can appreciate the wholesome influence exerted by Mr. Scott in that body. It was the first Legislature after the war had begun ; the attitude of the State and of the North had to be clearly defined and acted upon, and it was the group of war Democrats, embracing such men as John Scott ; John Rowe, of Franklin, who was made Speaker ; Cyrus L. Pershing, of Cambria, now President Judge of Schuylkill, and others, who saved the Legislature to thorough loyalty, and gave a hearty and aggressive support to the Lincoln administration and the prosecution of the war.

"Mr. Scott was an unflinching war Democrat from the beginning to the close of that bloody drama, and in 1864 he gave an ardent support to Lincoln for re-election. In 1869 a United States Senator was to be chosen by the Legislature to succeed Mr. Buckalew, and a number of distinguished Republicans in the State were candidates. Mr. Scott's name was generally discussed, but he was

not regarded as aggressively in the field until the Legislature met, when he was found to be the second choice of all the others; and when the caucus met he was nominated practically without opposition. It was a rare tribute to a man who had no skill in political manipulation, and he was chosen solely because of his admitted ability and integrity. His election was favored by General Cameron, then one of the Senators, but Senator Scott asserted himself at an early day in the Senate as a representative of a State, and not of a faction, and his Senatorial career is without a blemish. No member of the body ever performed his duties more conscientiously than did John Scott, and while he sought in no way to make himself a potent political factor, he retired from the Senate to be succeeded by Senator Wallace, a Democrat, with the respect of political friend and foe."

Mr. Blaine, in his "Twenty Years in Congress," speaks of Mr. Scott's service in the United States Senate as being "distinguished by intelligence and fidelity." That characterization can be truly applied to every pathway of life he has trodden. All enterprises which tended to the advancement and welfare of his fellow-men always found him one of their most active promoters.

His private life was an unblemished one, lived most beautifully in the home, church and social circles, where his presence or approach was accompanied by a halo of Christian simplicity and truth.

Dropping words of cheer, wisdom and comfort, and dispensing a broad charity, he moved along life's pathways, welcomed and loved by all with whom he came in contact.

As a resident of Huntingdon he was one of the original incorporators and a director of the Huntingdon and Broad Top Railroad Company, a director of the Huntingdon Gas Company, a member of the banking firm of Bell, Garrettson & Co., a director of the First National Bank of Huntingdon, trustee of the Academy, School Director, and elder in the Presbyterian Church, assistant superintendent and superintendent of the Sunday-school, and, what perhaps marks as strongly as any other fact in his life the confidence reposed in him, he was, during these years, executor, administrator and trustee of many estates and guardian of over thirty minor children, of all of which trusts he settled accounts before he left Hun-

tingdon County, and from all of these trusts he was, at his own request, discharged, no exception having been filed to any one of these numerous accounts. During his residence in Pittsburgh he was manager of the Dixmont Hospital and a director in the Western Theological Seminary.

Since his location in Philadelphia he became an elder of the Walnut Street Presbyterian Church, member of the Board of Publication and Sabbath School Work, a member of the Board of Ministerial Relief, a director and trustee of Princeton Theological Seminary, a trustee of the University of Pennsylvania, and a member of the Advisory Board of the Pennsylvania Railroad Department of the Young Men's Christian Association of Philadelphia.

Mr. Scott never lost interest in his early home, and the scenes of his early trials and triumphs. He visited Huntingdon and Alexandria several times each year, and during the Centennial Anniversary ceremonies of the county in September, 1896, was one of the most conspicuous figures and speakers present. The news of his death cast a gloom over the whole county. The "Globe" but voiced the opinions of the community when it said: "Mr. Scott was one of the most prominent of the many great and illustrious men contributed to the world by Huntingdon County. As a leading citizen of the community for many years, all knew him. Here he grew from childhood to manhood, from obscurity to renown, from weakness to power. He was revered for his learning, respected for his piety, and loved for his social qualities. Huntingdon countians mourn the loss of this great and good man, and they sympathize with the family in their great bereavement."

On Wednesday, December 2, 1896, simple and impressive funeral services were held over his remains at the West Walnut Street Presbyterian Church, Walnut street, above Thirty-ninth street, Philadelphia. They were very largely attended by his countless friends from all walks of life. With the exception of President George B. Roberts and Director Henry D. Welsh, who were detained by illness, an almost complete body of the Board of Executive Officers of the Pennsylvania Railroad Company were in the church to pay their last respects. There, too, sat delegations from the Penn Mutual Life Insurance Company, the University of Penn-

sylvania Board of Trustees, and the Presbyterian Board of Ministerial Relief. Also the members of the Sessions of the Church, and many members of the staff of the Jefferson Medical College and of the Theological Seminary of Princeton.

The pall bearers were: John P. Green, Second Vice President Pennsylvania Railroad Company; Charles E. Pugh, Third Vice President; James A. Logan, General Solicitor; C. Stuart Patterson, Director; B. B. Comegys, President Philadelphia National Bank, and Director; John C. Sims, Secretary Pennsylvania Railroad Company; William Thompson, Director Centennial National Bank, of which Mr. Scott was also a Director; Dr. John P. Chapin, Superintendent of the Pennsylvania Hospital for the Insane; Henry F. West, Vice President Penn Mutual Life Insurance Company; and Judge John M. Bailey, of Huntingdon. The final private service was held and interment made at Woodlands Cemetery.

On December 9, 1896, at a meeting of the Board of Directors of the Pennsylvania Railroad Company, the Chairman announced to the Board Mr. Scott's death.

Whereupon the following record was ordered to be entered upon the minutes:

"Mr. Scott was born at Alexandria, Huntingdon County, Pennsylvania, in 1824, studied law in the office of the Hon. Alexander Thomson, and was admitted to the Bar in 1846. In 1857 he was associated with Judge Pershing, of Pottsville, then resident counsel of the Company, in trying a protracted and important case in Cambria County. Mr. Scott then entered the Company's service as special counsel for the district comprising Cambria, Blair and Huntingdon Counties, taking charge, also, of the questions arising out of the transfer of the canals and railroads of the State to the Company. He served in this capacity until elected to the United States Senate, in 1869, for a term of six years, at the expiration of which he declined President Grant's tender of the office of Secretary of the Interior. He then took charge of the legal business pertaining to the Company's system west of Pittsburgh, organizing the Legal Department of the Pennsylvania Company and its controlled lines.

"Upon the resignation of Mr. William J. Howard, in November, 1877, Mr. Scott was appointed General Solicitor of the Pennsylva-

nia Railroad Company and the lines affiliated in interest therewith. He performed the responsible duties connected with that position with rare judgment and exceptional legal ability, and won the confidence and regard not only of his associates, but of all with whom he came in contact.

"His deep-rooted integrity, keen sense of justice and conscientious discharge of the trusts confided to him during his long term of service made him an invaluable adviser, and it was not until February 1, 1895, that failing health compelled his transfer, at his own request, to the less onerous position of counsel.

"At the time of his death he was engaged in the preparation of a history of the Legal Department, in connection with the record of the Fiftieth Anniversary of the grant of the Charter.

"The Board desire to make a record, not only of their sorrow at the death of an old and valued associate, but of their appreciation personally and officially of the admirable traits of character that made Mr. Scott a trusted friend, a wise counsellor, a pure and able legislator, and a fearless advocate of the right under all the varying circumstances that attended his career."

ROBERT NEILSON.

Robert Neilson, General Superintendent of the Philadelphia and Erie Railroad Division and the Northern Central Railway, died at his home in Williamsport, Pa., on Monday night, October 12, 1896, at 11.45. So sudden was the sad event that an hour and a half before its occurrence he was in fine spirits and apparently well. The immediate cause was the tightening of a film around the heart.

No officer in the service was more valued than Mr. Neilson, and his loss was keenly felt. Possessed of a high order of administrative and executive ability, with a wide knowledge of railroad affairs, and even temperament, kindness of heart and willingness of hand, he held the esteem of his associates, and the love of those who served under him. He was born August 19, 1837, in Ontario, Canada; was graduated in 1861 from Rensselaer Polytechnic Institute, Troy, N. Y., the *alma mater* of so many eminent railroad men. He entered the railroad service in October, 1863, as rodman on an Engineer Corps on the Middle Division of the Phila-



ROBERT NEILSON

delphia and Erie Railroad which was then being constructed, and continued there in that capacity until September, 1865, when he was appointed Resident Engineer of the same Division. He was promoted to Resident Engineer of the main line of the Pennsylvania Railroad, January, 1868, and two years later appointed Superintendent of the West Penn Division of the Pennsylvania Railroad. In September, 1874, he was transferred to the Superintendency of the Elmira and Canandaigua Division. This Division was at that time in a depleted and worn-out condition, and it took long and patient labor to bring it up from the state of apparent worthlessness to that of great value during his superintendency. His laborious work and its result on the Elmira and Canandaigua Division were eminently satisfactory, and upon the transfer of Mr. W. A. Baldwin, September 1, 1881, from the General Superintendency of the Philadelphia and Erie Railroad Division and the Division of the Northern Central Railway north of Harrisburg, Mr. Neilson was selected to succeed him. In January, 1883, the Baltimore Division was added to his jurisdiction, making the total mileage of the Division (with branches since built) nine hundred and thirty-three miles.

Mr. Neilson was thoroughly familiar with all the details of railroad management, and in that broad knowledge had few equals. His success in the different official positions he has occupied was due to having that good executive ability which obtains the maximum of result with the minimum of well directed effort; an exceptionally well-balanced mind, methodical and careful habits, and that rare faculty of arriving quickly at a correct estimate of a man's character and ability, a keen appreciation of the importance of being just and considerate to all his subordinates, and a genial disposition.

Mr. Neilson was a man of earnest and sincere religious faith, and took a deep interest in his church, the Protestant Episcopal, of which he was Senior Warden. The All Saints' Memorial Chapel of Williamsport he was largely instrumental in establishing, and was one of its most liberal supporters, financially and personally. He was a man of strong domestic tendencies, and devoted all his spare time to his family.

At a regular meeting, held in Philadelphia November 24, 1896, of the Association of the Transportation Officers of the Pennsyl-

vania Railroad Company, and of which Mr. Neilson had been a member to the time of his death, upon motion of Mr. George C. Wilkins, a member of the Executive Committee, seconded by Mr. F. D. Casanave and Mr. F. Wolcott Jackson, the following minute was unanimously approved :

"On the twelfth day of October, 1896, at his home in Williamsport, Pennsylvania, the General Superintendent of the Philadelphia and Erie Railroad and the Northern Central Railway, Mr. Robert Neilson, died, universally beloved and universally lamented.

"Robert Neilson entered the service in October, 1863, as rodman on the construction of the Philadelphia and Erie Railroad ; in the following March, 1864, he was made Assistant to the Resident Engineer of the Middle Division ; and in September, 1865, appointed the Resident Engineer of that Division.

"In January, 1868, he was appointed Resident Engineer of the Middle Division of the Pennsylvania Railroad ; and in January, 1870, was promoted to the Superintendency of the West Penn Division of that Road.

"In February, 1874, he was selected to fill the responsible position of Superintendent of the Elmira and Canandaigua Divisions of the Northern Central Railway ; and in September, 1881, he was promoted to the General Superintendency of the Philadelphia and Erie Railroad, and the lines of the Northern Central Railway north of Harrisburg. On the first day of January, 1883, his jurisdiction was extended over the Northern Central Railway south of Harrisburg to Baltimore, thus covering the entire line of the Northern Central and Philadelphia and Erie Roads, which position he occupied up to the day of his death, October 12, 1896.

"This, the brief history of thirty-three years of continuous service, is easily written ; but the work accomplished during that thirty-three years of active life, from early manhood to its sudden close in October last, cannot briefly be told ; it is enough to say here that he brought to every duty with which he was intrusted a conscientious and an intelligent consideration which has stamped his name indelibly upon the records of this service, and so long as the Philadelphia and Erie and the Northern Central Roads shall endure, the name of Robert Neilson will stand as an inspiration to the

older and an example to the younger men of the Pennsylvania Railroad system.

"Mr. Neilson combined in an unusual degree the qualities that make a successful operating officer. To the solid foundation of a trained civil engineer he quickly added a comprehensive grasp of transportation details, and to this, in later years, a general knowledge of traffic questions, particularly those affecting the line under his charge.

"He possessed good administrative ability; a judicial mind; sound judgment; an even temperament; a painstaking investigating spirit that enabled him to master every question that came before him; he was prompt and decisive in action; a firm, yet not a harsh disciplinarian; but more than this, he attached to himself the cordial support and co-operation of all those associated with him by the strength of his personality and the kindly interest he had in their individual welfare. This strong point in Mr. Neilson's character is attested not only by the personal esteem of those associated with him up to the close of his life's work, but by the steadfast regard of all those formerly associated with him, who carried away to their new fields of labor a sense of his abiding faith and interest in their future that never wavered and never ceased to manifest itself for their good, so far as it was in his power to promote it.

"A simplicity of character; a straightforward directness of purpose; an absolute standard of integrity in all his relations; a high sense of obligation to duty; a love for his fellow-men, and especially for those who were associated with him—these were the prominent characteristics of this man.

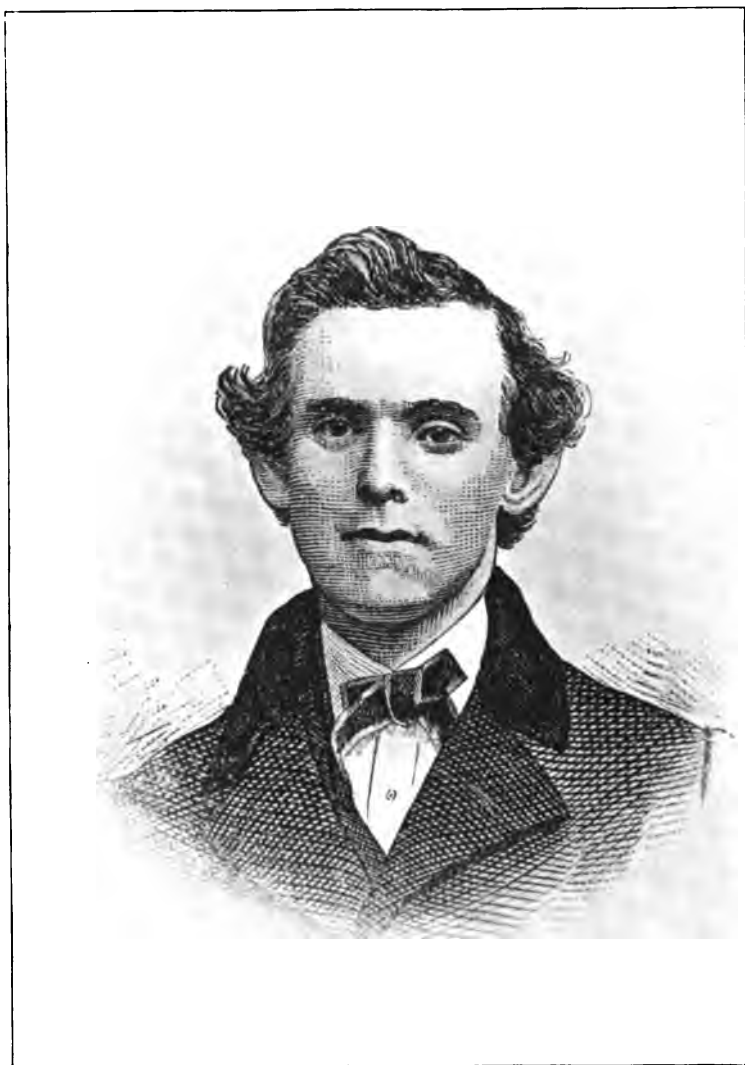
"It is therefore meet that we place on this Association's record that, notwithstanding our great appreciation of his official qualifications, the simple manliness of his character is that which will be longest remembered by his old associates and friends."

And upon motion it was adopted by a rising vote under the following resolution:

"*Resolved*, That the minute read be adopted, that it be spread upon the minutes of this Association, and that a copy of the same, duly attested, be sent by the Secretary to the family of the late Robert Neilson."

DAVID STROUSE.

David Strouse was born at Mexico, Juniata County, Pa., October 14, 1838. In 1850, after having attended the country school at his home, and studying one year at the Shade Gap Academy in Huntingdon County, and nine months at Tuscarora Academy, he entered the store of his uncle, James North, located in the Pennsylvania Railroad Company's warehouse at Patterson, Juniata County. Mr. North not only kept store and transacted railroad business, but was also the telegraph operator, although not an expert one. Young Strouse, in the lull which would occur in selling goods, soon picked up telegraphy, and became an expert operator. For several years previous to his induction in the telegraph office receiving dispatches by sound was not uncommon, but the practice was frowned down by the officials of the lines, and it was not until about the time he studied the science that sound-reading became prevalent and its application in a business way permitted. He soon became an expert "sound-reader," and served in the Mifflin and Spruce Creek offices, as well as at West Philadelphia and Altoona. He also served in a confidential capacity to Herman J. Lombaert, Thomas A. Scott and Enoch Lewis, General Superintendents, and to George C. Franciscus, Superintendent of the Philadelphia Division. His abilities as an operator were so commanding that the choice naturally fell upon him to lead the telegraphic party to Washington. When he arrived at the Capital he was appointed Superintendent of Military Telegraphs, and began at once building lines to connect the War Department with the Navy Yard, Arsenal, and the various camps as they were formed. His energy was sleepless, his determination undaunted. The fact that his frame was undermined by consumption did not deter him from pursuing his work with great activity. Obstacles which seemed insurmountable to others of his years he overcame with apparent ease. The confusion which reigned in Washington in the middle and early part of 1861, the inadequacy of the Departments to meet the requirements which the exigencies of the times demanded, the lacking in their officers of a proper conception of the needs of the great army springing into existence, all tended to harass the execution of his work, as he had to depend in a great measure upon the



DAVID STROUSE

Departments for assistance. Notwithstanding the difficulties which surrounded him he proceeded in the work of organization and construction with measurable success. A full and complete success would have crowned his efforts, but he fell early. The malarial influences of the Potomac worked such havoc upon his frail constitution that on August 15, 1861, he was compelled to return to his home on the Juniata, where he died of consumption on November 17th of that year. A short time before his death he composed these touching verses on his departure :

"Gentle river, ever flowing,
Where my early days were passed,
Like your waters, I am going
Sadly to the sea at last—

"To that ocean, dark and dreary,
Whence no traveler comes again ;
Where the spirit, worn and weary,
Finds repose from grief and pain.

"O'er the world I long have wandered ;
Now, a stranger, I return,
Hope, health and manhood squandered,
Life's last lesson here to learn.

"Calmly on the banks reposing,
I am waiting for the day
When calm twilight, softly closing,
Bears the trembling soul away."

Prompt, reliable, truthful, amiable, generous and just, David Strouse was of nature's nobility. In conjunction with a fund of practical knowledge he possessed a store of keen wit and quick repartee, which, added to his familiarity with polite and refined literature, made him an agreeable and instructive companion. His death was announced to his army comrades in the following paper :

"War Department,

"Washington, Nov. 18, 1861.

"To the Members of the United States Military Telegraph Corps :

"It is with heartfelt sorrow that we are compelled to announce to the Corps the death of our Superintendent, David Strouse. Ever true to the interests of the Government, attentive to the wants

and comfort of his subordinates, kind hearted and generous to a fault, he died lamented by all who knew him. His untiring efforts, known to and appreciated by all who were in the Corps during the first three months of its existence, served but to hasten the work of the disease which had marked poor Strouse for its victim. He breathed his last at ten o'clock on Sunday evening, and will be buried at eleven o'clock to-morrow (Tuesday) morning. Peace to his ashes.

"JAMES R. GILMORE,

"D. HOMER BATES,

"WM. B. WILSON."

APPENDIX.

JANUARY 1, 1899, the following changes in positions were made :

F. Wolcott Jackson, General Superintendent, United Railroads of New Jersey Division, to Resident Manager of United Railroads.

F. L. Sheppard, to General Superintendent, United Railroads of New Jersey Division, vice F. Wolcott Jackson.

J. M. Wallis, to General Superintendent, Pennsylvania Railroad Division, vice F. L. Sheppard.

G. W. Creighton, to General Superintendent of Philadelphia and Erie Railroad Division and Northern Central Railway, vice J. M. Wallis.

H. F. Kenney, resigned to accept executive duties in connection with the Philadelphia, Wilmington and Baltimore Railroad Company.

E. F. Brooks, to General Superintendent, Philadelphia, Wilmington and Baltimore Railroad, vice H. F. Kenney.

R. M. Patterson, to Superintendent, New York Division, vice E. F. Brooks.

W. Heyward Myers, to Superintendent, Middle Division, Pennsylvania Railroad, vice G. W. Creighton.

D. H. Lovell, to Superintendent, Delaware Extension and Kensington Division, vice R. M. Patterson.

A. W. Moss, to Superintendent, Schuylkill Division, vice W. Heyward Myers.

Frank F. Robb, to Superintendent, Monongahela Division, vice D. H. Lovell.

Victor Wierman, to Superintendent, Frederick Division, vice A. W. Moss.

F. P. Abercrombie, to Superintendent, Cambria and Clearfield Division, vice F. F. Robb.

S. P. Hutchinson, to Superintendent, Lewistown Division, vice Victor Wierman.

L. W. Allibone, to Superintendent, Bedford Division, vice F. P. Abercrombie.

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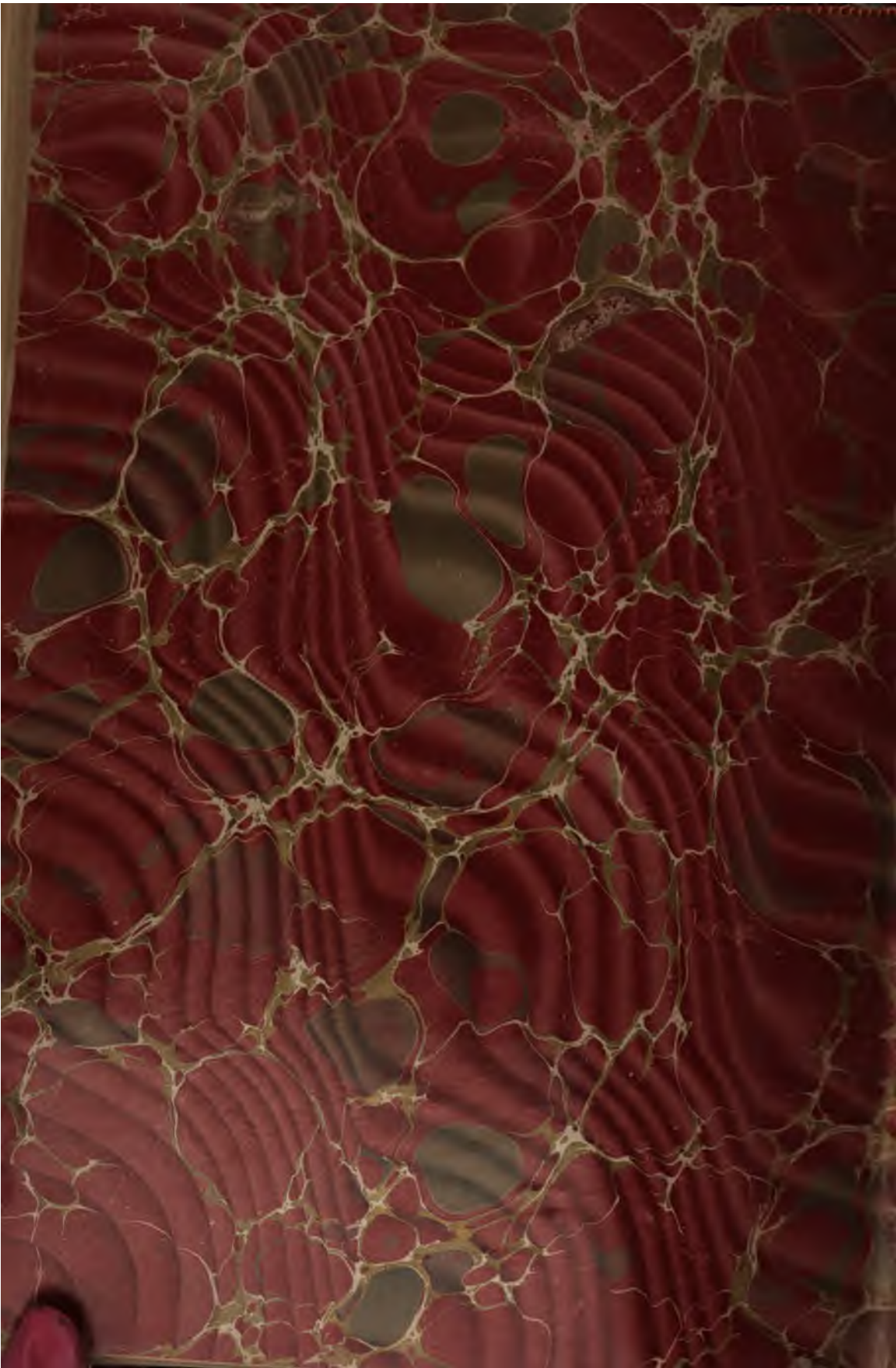
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